NEW GEOGRAPHICAL SURVEY OF THE WORLD

Wm K. Dietrich

Seminary Dormitory,

Lancaster

Pa

NEW GEOGRAPHICAL SURVEY OF THE WORLD

CONTENTS

	Pages
Maps of the World	3-97

DIAGRAMMATIC MAPS, ETC.

Areas of the Earth	94
Character of Land of the Earth	94
Panama Canal, Profile of	90-91
Religions of the World	94
Religious Sects of the United States	94
River Systems of the World	95
United States, Acquisition of Territory	97
Voyages of Discovery to America, 1492 to 1611	96

TEXT

Canada, Cities and Towns of	123-130
Congress, Representatives in	97
Distances between Larger Cities of the United States	105
Population of States and Territories of the U. S.	106
United States, Cities and Towns of	107-122
World, Principal Cities of	90-104
World, Principal Countries of	98
Part II—Handy Book of Facts	1-32
Part III—Uncle Sam's Workshop	1-36
Part IV—The Panama Canal	1-32

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ALPHABETICAL LIST OF STATES AND COUNTRIES

Indicating the Maps in the Atlas on which they are shown

	PAGE
Abyssinia	75
Afghanistan	86
Africa	75
Alabama	35
Alaska	66
Alberta	15
Algeria	75
Anam	86
Andorra	82
Angola	75
Antarctic Regions	92
Arabia	86
Arctic Regions	93
Argentina	74
Arizona	61
Arkansas	47
Asia	86
Australia	89
Austria-Hungary	76
Azores Islands	75
Bahama Islands	71
Balkan States	76
Baluchistan	86
Barbados	71
Belgium	81
Belize	73
Bhutan	86
Bokhara	86
Bolivia	74
Borneo	88
Bosnia	76
Brazil	74
British Columbia	16-17
British Honduras	73
British Isles	77
Bulgaria	76
California	62
Canada	5
Canal Zone, U. S.	70
Canary Islands	75
Cape Breton Island	6
Cape of Good Hope	75
Caroline Islands	88
Caucasia	85
Central Africa, British	75
Central America	73
Ceylon	86
Chile	74
China	86
Chosen, (see Korea)	86
Colombia	74
Colorado	59
Connecticut	24
Costa Rica	73
Crete	76
Cuba	70
Curacao	71
Dahomey	75
Delaware	28
Denmark	80
District of Columbia	28
East Africa, German	75
East Africa, Portuguese	75
East Indies	88
Ecuador	74
Egypt	75
England	77
Erythrea	75
Europe	76
Fiji Islands	88
Florida	34
Formosa	86
France	82
Gambia	75
Georgia	33
Germany, Eastern	79
Germany, Western	78
Gibraltar	83
Gold Coast	75
Greece	76
Greenland	4
Guam	88
Guatemala	73
Guiana, British	74
Guiana, Dutch	74
Guiana, French	74
Guinea, French	75
Guinea, Portuguese	75
Haiti	71
Hawaii	67
Holland	81
Honduras	73
Hungary	76
Iceland	76
Idaho	57
Illinois	43
India	86
Indiana	40
Iowa	45
Ireland	77
Italy	84
Ivory Coast	75
Jamaica	71, 73
Japan	86
Java	88
Kamerun	75
Kansas	51
Kentucky	37
Khiva	86
Kongo, Belgian	75
Kongo, French	75
Korea	86
Labrador	5
Leeward Islands	71
Liberia	75
Louisiana	48
Luxemburg	81
Madagascar	75
Madeira Islands	75
Maine	19
Malta	76
Manitoba	13
Marianne Islands	88
Maritime Provinces	6
Marshall Islands	88
Martinique	71
Maryland	28
Massachusetts	22
Mexico	72
Michigan	41
Midway Island	88
Minnesota	44
Mississippi	36
Missouri	46
Monaco	82
Montana	55
Montenegro	86
Morocco	75
Natal	75
Nebraska	52
Nepal	86
Netherlands	81
Nevada	63
New Brunswick	6
Newfoundland	6
New Guinea	88
New Hampshire	21
New Jersey	26
New Mexico	60
New South Wales	89
New York	25
New Zealand	89
Nicaragua	73
Nigeria	75
North America	4
North Carolina	31
North Dakota	53
Northwest Territories	5
Norway	80
Nova Scotia	6
Nubia	75
Nyassaland Protectorate	75
Ohio	39
Oklahoma	50
Oman	86
Ontario	10, 12
Orange Free State	75
Oregon	64
Pacific Ocean	88
Palestine, Modern	87
Panama	73
Panama Canal	90, 91
Paraguay	74
Pennsylvania	27
Persia	87
Peru	74
Philippine Islands	68
Porto Rico	69
Portugal	83
Prince Edward Island	6
Quebec	7, 9
Queensland	89
Rhode Island	23
Rhodesia	75
Rio de Oro	75
Roumania	76
Russia	85
Russia in Asia	86
Salvador	73
Samoa	88
San Marino	84
Santo Domingo	71
Saskatchewan	14
Scotland	77
Senegal	75
Senegambia	75
Servia	76
Siam	86
Siberia	86
Sierra Leone	75
Solomon Islands	88
Somali Coast, British	75
Somali Coast, French	75
Somaliland, Italian	75
South America	74
South Australia	89
South Carolina	32
South Dakota	54
Southwest Africa, German	75
Spain	83
Straits Settlements	86
Sudan	75
Sumatra	86
Sweden	80
Switzerland	76
Tasmania	89
Tennessee	38
Texas	49
Togo	75
Transvaal	75
Trinidad	71
Tripoli	75
Tunis	75
Turkey	76
Turkey in Asia	86
Tutuila	88
United States, Political	18
United States, Showing Acquisitions of Territory	97
Uruguay	74
Utah	58
Venezuela	74
Vermont	20
Victoria	89
Virginia	29
Wales	77
Washington	65
Western Australia	89
West Indies	71
West Virginia	30
Windward Islands	71
Wisconsin	42
World, on Mercator's Projection	3
Wyoming	56
Yukon	66

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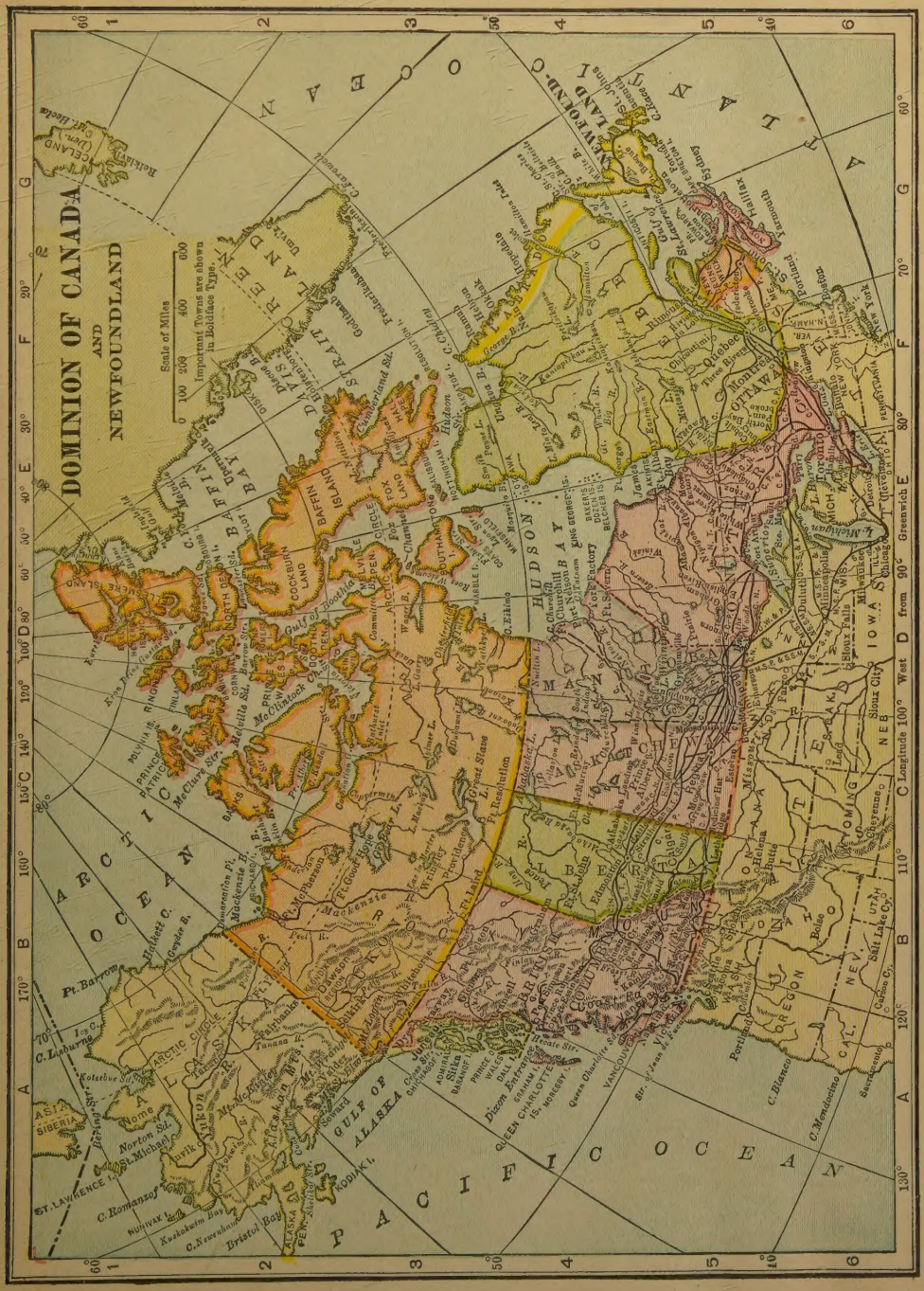
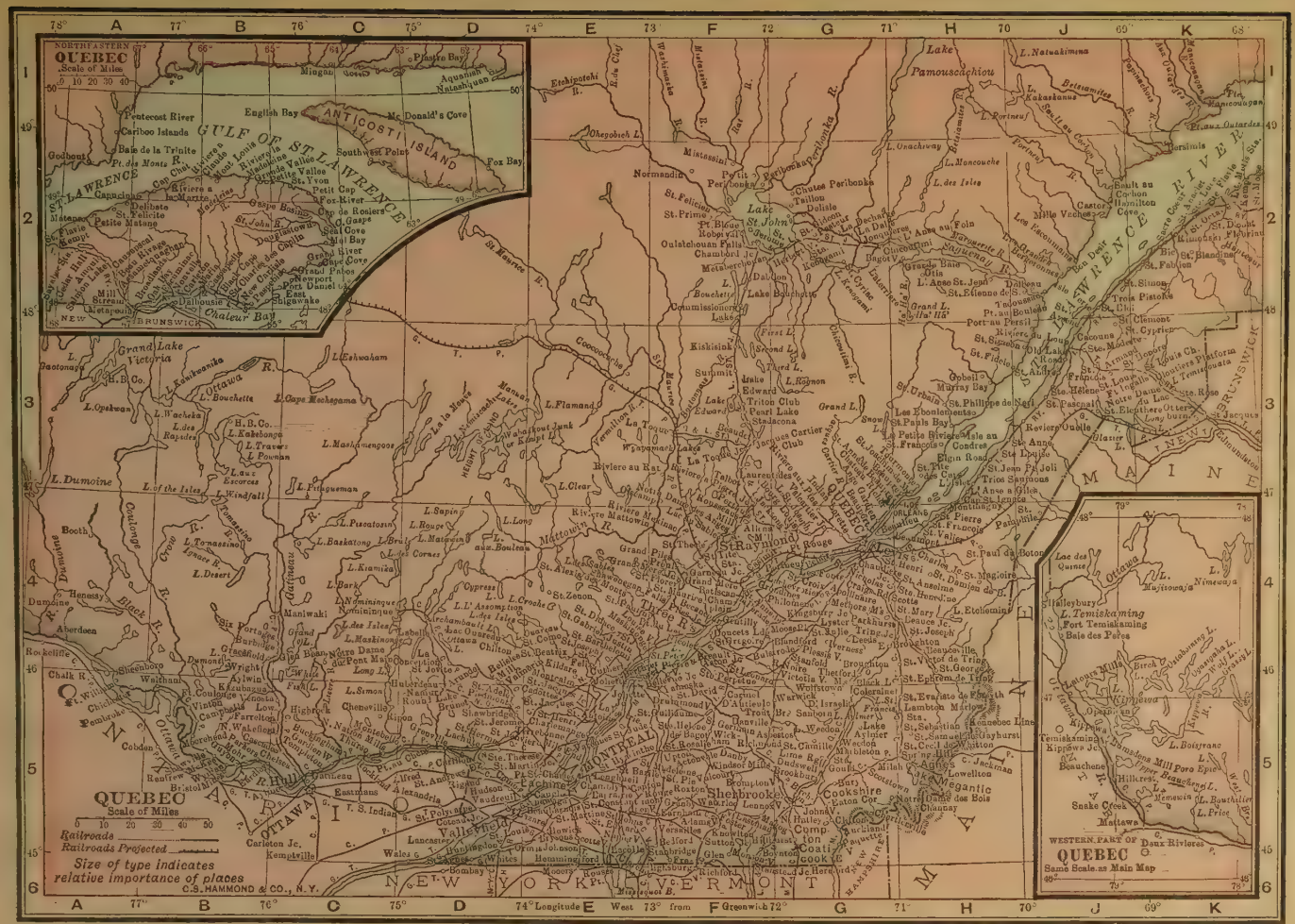
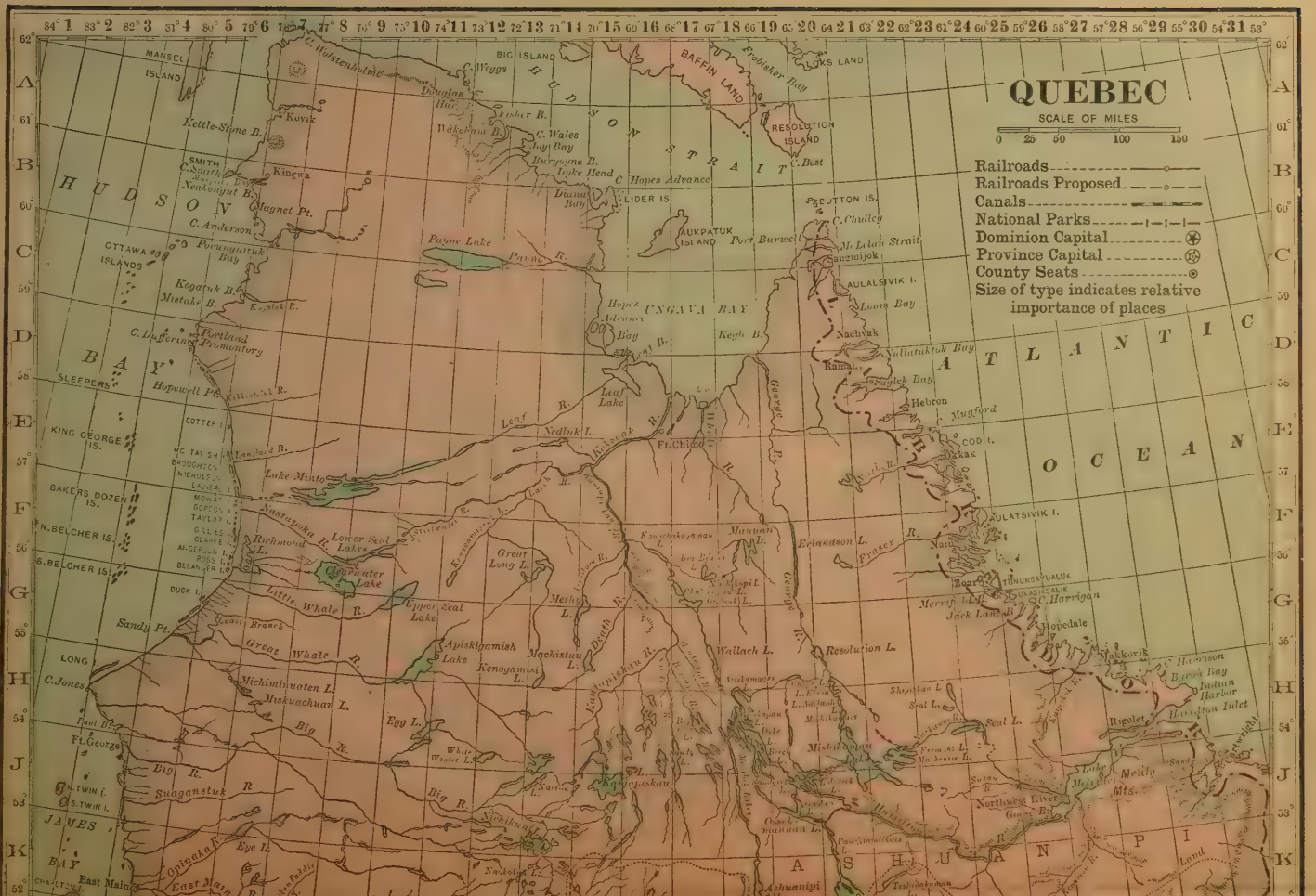
THE WORLD
ON MERCATOR'S PROJECTION
ARCTIC OCEAN
ATLANTIC OCEAN
PACIFIC OCEAN
INDIAN OCEAN
ANTARCTICA
NORTH AMERICA
SOUTH AMERICA
EUROPE
ASIA
AFRICA
AUSTRALIA
GREENLAND
RUSSIAN EMPIRE
DOMINION OF CANADA
UNITED STATES
CENTRAL AMERICA
BRAZIL
CHINA
JAPAN
INDIA
SIBERIA
ALASKA
MEXICO
ARGENTINA
CHILE
PERU
NEW-ZEALAND
TASMANIA
MADAGASCAR
SPITZBERGEN
NOVA ZEMBLA
ICELAND
FRANZ JOSEF LAND
GRAHAM LAND
FALKLAND IS.
KERGUELEN I.
C. Farewell
Cape Horn
Cape of Good Hope
C. Chelyuskin
Behring Sea
Beaufort Sea
Baffin Bay
Hudson Bay
Barents Sea
Kara Sea
North C.
Strait of Magellan
Panama Canal
Suez Canal
Gulf of Mexico
Caribbean Sea
Sahara
Arabian Sea
Bay of Bengal
Mediterranean Sea
Black Sea
Caspian Sea
Persian Gulf
Red Sea
Monday
Sunday
International Date Line
ARCTIC CIRCLE
TROPIC OF CANCER
EQUATOR
TROPIC OF CAPRICORN
ANTARCTIC CIRCLE
Longitude 120° East
Longitude 100° West
from Greenwich
Longitude 60° East
C.S. HAMMOND & CO., N.Y.

NORTH AMERICA
Scale of Miles
0 200 400 600 800 1000
Important towns are shown in heavy face type
110 Longitude West from Greenwich
EQUATOR
TROPIC OF CANCER
ARCTIC CIRCLE
PACIFIC OCEAN
ATLANTIC OCEAN
ARCTIC OCEAN
GULF OF MEXICO
CARIBBEAN SEA
HUDSON BAY
GREENLAND
DOMINION OF CANADA
UNITED STATES
MEXICO
CENTRAL AMERICA
SOUTH AMERICA
BERMUDA IS. (Br.)
BAHAMA ISLANDS
PORTO RICO
JAMAICA
HAVANA
NEW ORLEANS
SAN FRANCISCO
PORTLAND
SEATTLE
VANCOUVER
MONTREAL
QUEBEC
OTTAWA
HALIFAX
BOSTON
NEW YORK
PHILADELPHIA
BALTIMORE
WASHINGTON
CHICAGO
DENVER
ST. LOUIS
MINNEAPOLIS
WINNIPEG
EDMONTON
CALGARY
VICTORIA
LOS ANGELES
SAN DIEGO
PHOENIX
EL PASO
HOUSTON
GALVESTON
TAMPA
MOBILE
SAVANNAH
CHARLESTON
C. HATTERAS
C. MENDOCINO
C. BLANCO
C. SAN LUCAS
C. CHURCHILL
C. CHIDLEY
C. FAREWELL
C. DARBY
C. MORRIS JESUP
C. ALEXANDER
C. BARROW
C. PARRY
C. PANAMA
C. CANAVERAL
C. SABLE
C. RACE
C. ST. ROQUE
C. ST. LUCAS
C. CORRIENTES
C. SAN LUCAS
C. SAN ROQUE
C. SAN LUCAS
C. SAN ROQUE
C. SAN LUCAS
C. SAN ROQUE


DOMINION OF CANADA
AND
NEWFOUNDLAND
Scale of Miles
0 100 200 400 600
Important Towns are shown in Boldface Type.
ARCTIC OCEAN
PACIFIC OCEAN
ATLANTIC OCEAN
HUDSON BAY
BAFFIN BAY
DAVIS STRAIT
GULF OF ALASKA
BAFFIN ISLAND
COCHRAN LAND
PRINCE PATRICK I.
MELVILLE I.
BANKS I.
VICTORIA I.
KING WILLIAM I.
SOUTHAMPTON I.
COATS I.
MARBLE I.
NORTHUMBERLAND I.
ANTICOSTI I.
NEWFOUNDLAND
PRINCE EDWARD I.
CAPE BRETON I.
QUEEN CHARLOTTE IS.
VANCOUVER I.
KODIAK I.
ALEUTIAN IS.
ALASKA
YUKON TERR.
MACKENZIE
KEEWATIN
ONTARIO
QUEBEC
MANITOBA
SASKATCHEWAN
ALBERTA
BRITISH COLUMBIA
NEW BRUNSWICK
NOVA SCOTIA
MAINE
MINN.
N. DAK.
MONT.
IDAHO
WASH.
OREGON
CAL.
NEV.
UTAH
WYOMING
COLO.
NEB.
IOWA
S. DAK.
MICH.
WIS.
ILL.
Ottawa
Toronto
Montreal
Quebec
Winnipeg
Edmonton
Regina
Victoria
Vancouver
Halifax
St. John
Fredericton
Charlottetown
Chicago
Milwaukee
Minneapolis
St. Paul
Duluth
Sioux Falls
Sioux City
Omaha
Denver
Salt Lake City
Portland
Seattle
San Francisco
Sacramento
Boise
Helena
Cheyenne
Detroit
Buffalo
Cleveland
Pittsburg
Boston
New York
Philadelphia
Washington
Baltimore
Richmond
Norfolk
Charleston
Savannah
Atlanta
Nashville
Memphis
New Orleans
Galveston
Houston
Dallas
Kansas City
St. Louis
Indianapolis
Columbus
Louisville
Cincinnati
Pittsburg
Albany
Hartford
Providence
Portland
Augusta
Concord
Montpelier
Burlington
Trenton
Dover
Annapolis
Frankfort
Springfield
Lansing
Madison
Jefferson City
Topeka
Lincoln
Cheyenne
Carson City
Phoenix
Santa Fe
Austin
Oklahoma
Little Rock
Jackson
Tallahassee
Montgomery
Raleigh
Columbia
Charleston
Nashville
Knoxville
Chattanooga
Birmingham
Mobile
Pensacola
Tampa
Key West
Miami
Jacksonville
Orlando
Tallahassee
Pt. Barrow
C. Lisburne
Kotzebue Sd.
Nome
St. Michael
Norton Sd.
Yukon R.
Behring Sea
ASIA
SIBERIA
ST. LAWRENCE I.
C. Romanzof
Nunivak I.
Kuskokwim Bay
C. Newenham
Bristol Bay
Alaska Pen.
Aleutian Is.
Kodiak I.
Mackenzie R.
Great Slave L.
Great Bear L.
Athabasca L.
Lake Winnipeg
Lake Manitoba
Lake Winnipegosis
Lake of the Woods
Lake Superior
Lake Michigan
Lake Huron
Lake Erie
Lake Ontario
Lake Nipigon
Lake Nipissing
Lake Abitibi
Lake Timiskaming
Lake Temiscamingue
Lake Mistassini
Lake St. John
Lake Champlain
Lake Memphremagog
Lake Winnipesaukee
Lake Moosehead
Lake Chemo
Lake Pontchartrain
Lake Maracaibo
Lake Okeechobee
Lake Pontchartrain
Great Salt Lake
Lake Tahoe
Lake Pyramid
Lake Winnemucca
Lake Malheur
Lake Klamath
Lake Chelan
Lake Pend d'Oreille
Lake Coeur d'Alene
Lake Flathead
Lake Waterton
Lake Minnetonka
Lake Okoboji
Lake Traverse
Lake Winnebago
Lake Pepin
Lake Mille Lacs
Lake Winnebago
Lake Pepin
Lake Mille Lacs
Lake Winnebago
Lake Pepin
Lake Mille Lacs

THE MARITIME PROVINCES OF CANADA
With Insert Map of NEWFOUNDLAND
NEW BRUNSWICK, NOVA SCOTIA, PRINCE EDWARD ISLAND
Scale of Miles
0 10 20 30 40 50 60 70 80
Railroads
Submarine Telegraph Lines
Capitals of Provinces
Size of type indicates relative importance of places
Longitude West from Greenwich
C.S.HAMMOND & CO., N.Y.
GULF OF ST. LAWRENCE
ATLANTIC OCEAN
PRINCE EDWARD ISLAND
CAPE BRETON ISLAND
NEWFOUNDLAND
QUEBEC
NEW BRUNSWICK
MAINE
Scale of Miles
0 20 40 60


NORTH EASTERN QUEBEC
Scale of Miles
0 10 20 30 40
Mingan
Plaster Bay
Aguanus
Natashquan
Godbout
Pt. des Monts
Riviere a Marsouin
Riviere a Mal Baie
Riviere a Claude
Riviere a Vallee
Riviere a Petite Vallee
Riviere a Petit Cap
Riviere a Fox River
Riviere a Grand Cap
Riviere a Corneille
Riviere a Pentecote
Riviere a Manitou
Riviere a Pigou
Riviere a Portneuf
Riviere a Godbout
Riviere a Moisie
Riviere a Sault au Mouton
Riviere a Watshishou
Riviere a Nipissis
Riviere a Natashquan
Riviere a Kegashka
Riviere a Musquaro
Riviere a Piashti
Riviere a Kenamitis
Riviere a Romaine
Riviere a Corneille
Riviere a Pentecote
Riviere a Manitou
Riviere a Pigou
Riviere a Portneuf
Riviere a Godbout
Riviere a Moisie
Riviere a Sault au Mouton
Riviere a Watshishou
Riviere a Nipissis
Riviere a Natashquan
Riviere a Kegashka
Riviere a Musquaro
Riviere a Piashti
Riviere a Kenamitis
Riviere a Romaine
Protector River
Cariboo Islands
Baie de la Trinite
Pt. des Monts R.
Godbout
Riviere a Marsouin
Riviere a Mal Baie
Riviere a Claude
Riviere a Vallee
Riviere a Petite Vallee
Riviere a Petit Cap
Riviere a Fox River
Riviere a Grand Cap
Riviere a Corneille
Riviere a Pentecote
Riviere a Manitou
Riviere a Pigou
Riviere a Portneuf
Riviere a Godbout
Riviere a Moisie
Riviere a Sault au Mouton
Riviere a Watshishou
Riviere a Nipissis
Riviere a Natashquan
Riviere a Kegashka
Riviere a Musquaro
Riviere a Piashti
Riviere a Kenamitis
Riviere a Romaine
English Bay
Mc Donald's Cove
ANTICOSTI ISLAND
Southwest Point
Fox Bay
GULF OF ST LAWRENCE
ST LAWRENCE RIVER
Caparoche
Riviere a Marsouin
Riviere a Mal Baie
Riviere a Claude
Riviere a Vallee
Riviere a Petite Vallee
Riviere a Petit Cap
Riviere a Fox River
Riviere a Grand Cap
Riviere a Corneille
Riviere a Pentecote
Riviere a Manitou
Riviere a Pigou
Riviere a Portneuf
Riviere a Godbout
Riviere a Moisie
Riviere a Sault au Mouton
Riviere a Watshishou
Riviere a Nipissis
Riviere a Natashquan
Riviere a Kegashka
Riviere a Musquaro
Riviere a Piashti
Riviere a Kenamitis
Riviere a Romaine
Mingan Islands
Natashquan
Aguanus
Natashquan R.
Mingan
Plaster Bay
Aguanus
Natashquan
Godbout
Pt. des Monts R.
Riviere a Marsouin
Riviere a Mal Baie
Riviere a Claude
Riviere a Vallee
Riviere a Petite Vallee
Riviere a Petit Cap
Riviere a Fox River
Riviere a Grand Cap
Riviere a Corneille
Riviere a Pentecote
Riviere a Manitou
Riviere a Pigou
Riviere a Portneuf
Riviere a Godbout
Riviere a Moisie
Riviere a Sault au Mouton
Riviere a Watshishou
Riviere a Nipissis
Riviere a Natashquan
Riviere a Kegashka
Riviere a Musquaro
Riviere a Piashti
Riviere a Kenamitis
Riviere a Romaine
Protector River
Cariboo Islands
Baie de la Trinite
Pt. des Monts R.
Godbout
Riviere a Marsouin
Riviere a Mal Baie
Riviere a Claude
Riviere a Vallee
Riviere a Petite Vallee
Riviere a Petit Cap
Riviere a Fox River
Riviere a Grand Cap
Riviere a Corneille
Riviere a Pentecote
Riviere a Manitou
Riviere a Pigou
Riviere a Portneuf
Riviere a Godbout
Riviere a Moisie
Riviere a Sault au Mouton
Riviere a Watshishou
Riviere a Nipissis
Riviere a Natashquan
Riviere a Kegashka
Riviere a Musquaro
Riviere a Piashti
Riviere a Kenamitis
Riviere a Romaine
Mingan Islands
Natashquan
Aguanus
Natashquan R.
Mingan
Plaster Bay
Aguanus
Natashquan
Godbout
Pt. des Monts R.


QUEBEC
SCALE OF MILES
0 25 50 100 150
Railroads
Railroads Proposed
Canals
National Parks
Dominion Capital
Province Capital
County Seats
Size of type indicates relative importance of places
HUDSON BAY
HUDSON STRAIT
BAFFIN LAND
ATLANTIC OCEAN
UNGAVA BAY
JAMES BAY
LABRADOR
Kuvik
Kingwa
Magnet Pt.
Kogaluk R.
Mistake B.
Hopewell Pt.
Leaf R.
Nedluk L.
Lake Minto
Richmond Gulf
Great Whale R.
Little Whale R.
Sandy Pt.
Apiskimamish Lake
Kenoyamist L.
Machistau L.
Michikimiuaten L.
Miskuachuan L.
Egg L.
Big R.
Ft. Geuzes
Sunganstuk R.
Opinaka R.
Eye L.
East Main R.
Payne Lake
Payne R.
Port Burwell
Nachvak
Hebron
Ft. Chimo
George R.
Koksoak R.
Resolution L.
Wallach L.
Great Long L.
Upper Seal Lake
Lower Seal Lakes
Clearwater Lake
Nastapoka R.
Kaniapiskau R.
Koksoak R.
Northwest River
Grand Falls
Mts.
Melly Mts.
Rigolet
Indian Harbor
Hamilton Inlet
Hopedale
Okkak
Nain
Zoar
Jack Land
Merrifield
Seal L.
Shepeian L.
Mistassini L.
Mistassini R.
Nichikun L.
Waswanipi R.
Nemiscau R.
Rupert R.
Eastmain R.
Ashuanipi
Nichikun
Waswanipi
Nemiscau
Rupert
Eastmain
Broughton I.
Nicholas I.
Mowat I.
Gordon I.
Taylor I.
Gilles I.
Clarke I.
Algerpeuse I.
Ross I.
Bellanger I.
Duck I.
Twin I.
Long I.
Jones
Belcher Is.
Baker's Dozen Is.
King George Is.
Sleepers
Ottawa Islands
Cotter I.
Smith
Neskonguat B.
Kettle-Stone B.
Douglas Harbour
Big Island
Lucks Land
Button Is.
Lider Is.
Aukpatuk Island
Aullatsivik I.
Louis Bay
Nachvak
Nullatuktok Bay
Ramah
Saunnijok
Mugford
Cod I.
Okkak
Aulatsivik I.
Tunungayualuk
Okkosksalik
Harrigan
Jack Land
Merrifield
Hopedale
Okkovik
Harrison
Byron Bay
Indian Harbor
Hamilton Inlet
Rigolet
Seal L.
Shepeian L.
Mistassini L.
Mistassini R.
Nichikun L.
Waswanipi R.
Nemiscau R.
Rupert R.
Eastmain R.
Ashuanipi
Nichikun
Waswanipi
Nemiscau
Rupert
Eastmain
Broughton I.
Nicholas I.
Mowat I.
Gordon I.
Taylor I.
Gilles I.
Clarke I.
Algerpeuse I.
Ross I.
Bellanger I.
Duck I.
Twin I.
Long I.
Jones
Belcher Is.
Baker's Dozen Is.
King George Is.
Sleepers
Ottawa Islands
Cotter I.
Smith
Neskonguat B.
Kettle-Stone B.
Douglas Harbour
Big Island
Lucks Land
Button Is.
Lider Is.
Aukpatuk Island
Aullatsivik I.
Louis Bay
Nachvak
Nullatuktok Bay
Ramah
Saunnijok
Mugford
Cod I.
Okkak
Aulatsivik I.
Tunungayualuk
Okkosksalik
Harrigan
Jack Land
Merrifield
Hopedale
Okkovik
Harrison
Byron Bay
Indian Harbor
Hamilton Inlet
Rigolet
Seal L.
Shepeian L.
Mistassini L.
Mistassini R.
Nichikun L.
Waswanipi R.
Nemiscau R.
Rupert R.
Eastmain R.
Ashuanipi
Nichikun
Waswanipi
Nemiscau
Rupert
Eastmain

GULF OF ST. LAWRENCE
ATLANTIC OCEAN
Longitude West from Greenwich
Boston
Halifax
Quebec
Montreal
Ottawa
Toronto
Kingston
L. ONTARIO
Rochester
Buffalo
Cape North
Cape Breton Island
Prince Edward Island
Charlottetown
Magdalen Islands
Anticosti I.
Cabot Strait
Gaspé
Fredericton
St. John
Portland
Lake Champlain
Lake Nipissing
Lake Temiscaming
Lake Timagami
Lake Abitibi
Lake Mistassini
Lake St. John
Lake Manicouagan
Lake Nipigon
Lake Superior
Lake Michigan
Lake Huron
Lake Erie
Lake Winnipeg
Lake Winnipegosis
Lake Manitoba
Lake of the Woods
Lake Athabasca
Great Slave Lake
Great Bear Lake
Lake Athapapuskow
Lake Dauphin
Lake Winnipegoosis
Lake Kamanistiquia
Lake Nipigon
Lake Abitibi
Lake Mistassini
Lake St. John
Lake Manicouagan
Lake Nipissing
Lake Temiscaming
Lake Timagami
Lake Champlain
Lake Superior
Lake Michigan
Lake Huron
Lake Erie
Lake Winnipeg
Lake Winnipegosis
Lake Manitoba
Lake of the Woods
Lake Athabasca
Great Slave Lake
Great Bear Lake
Lake Athapapuskow
Lake Dauphin
Lake Winnipegoosis
Lake Kamanistiquia
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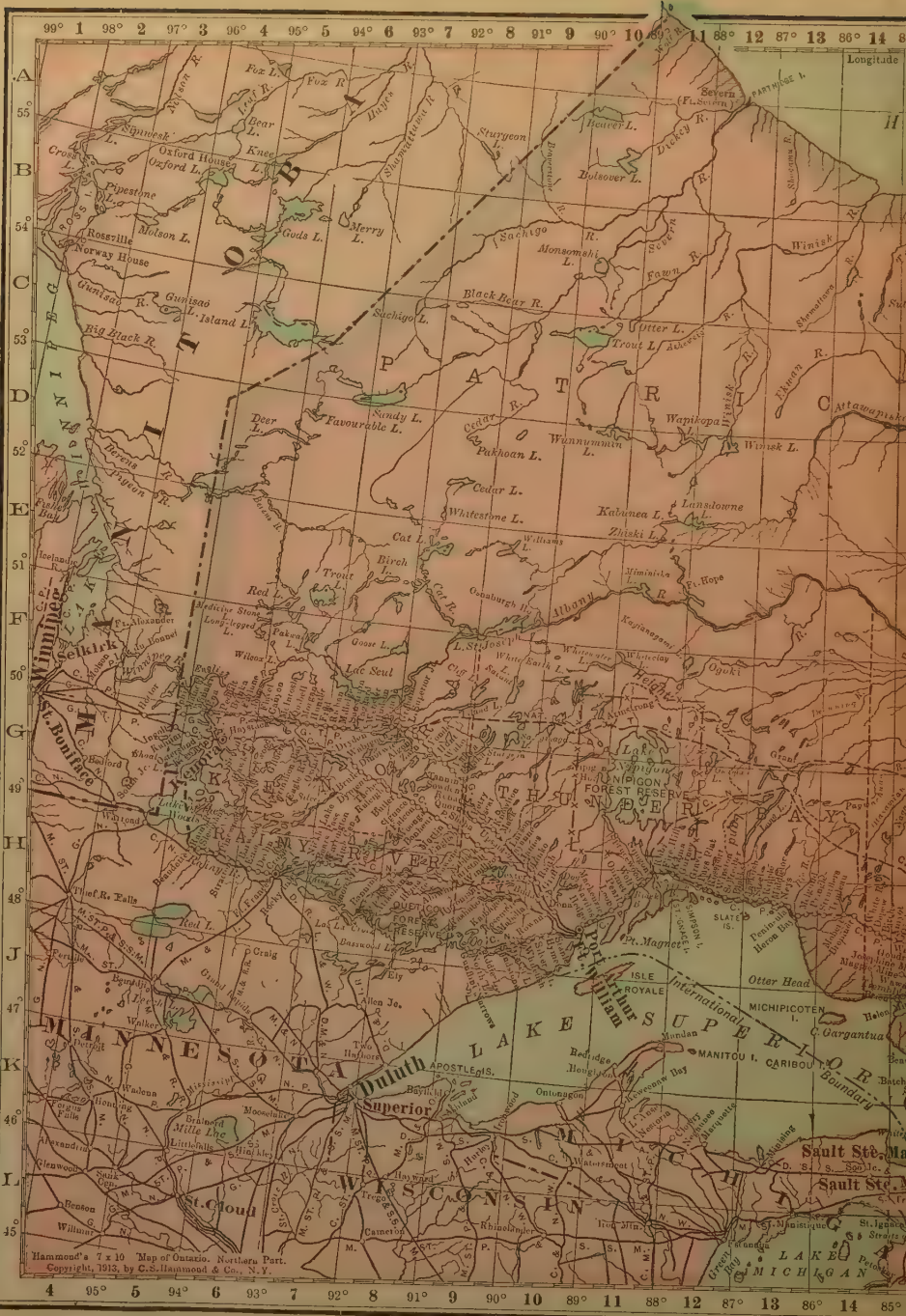
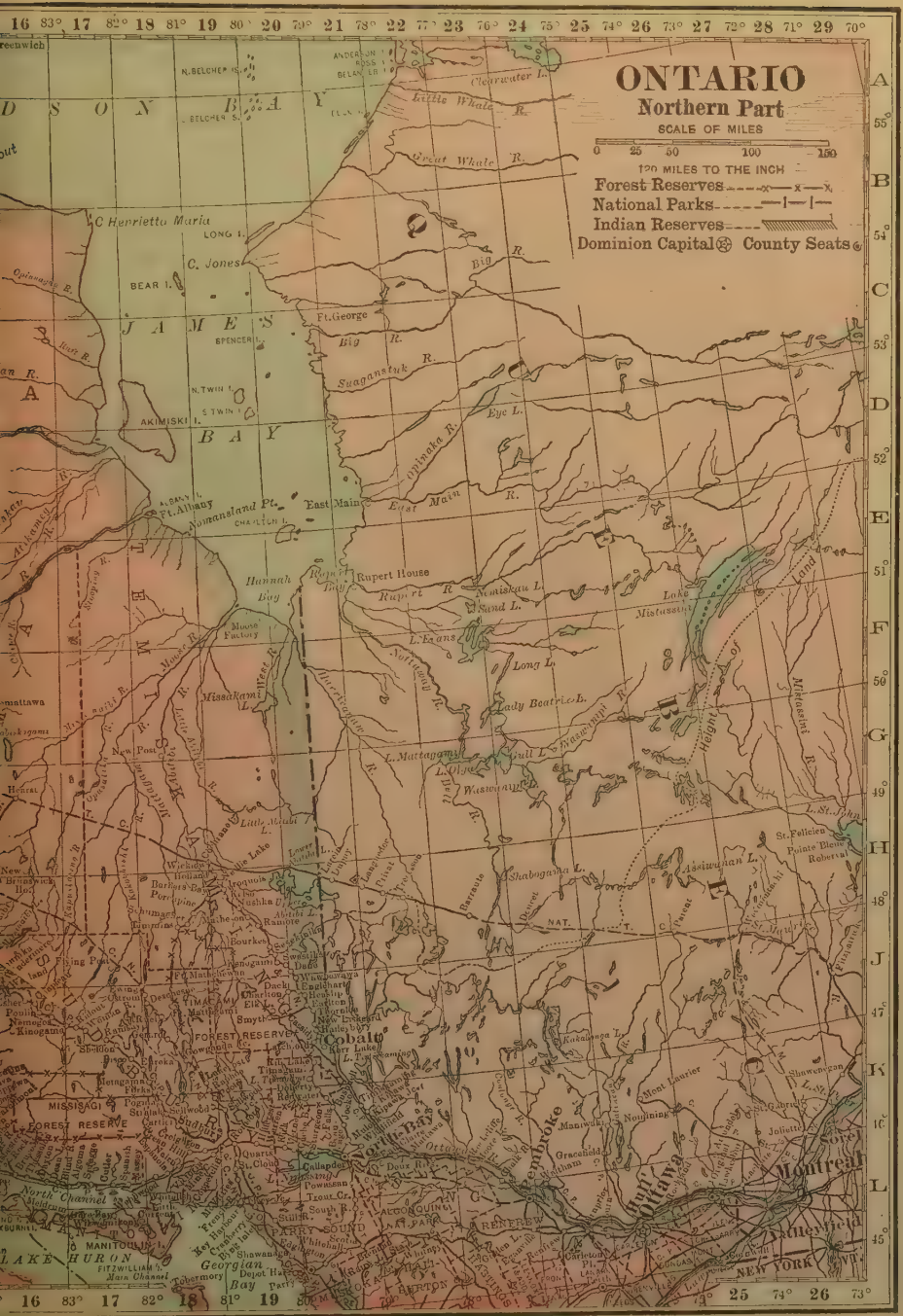
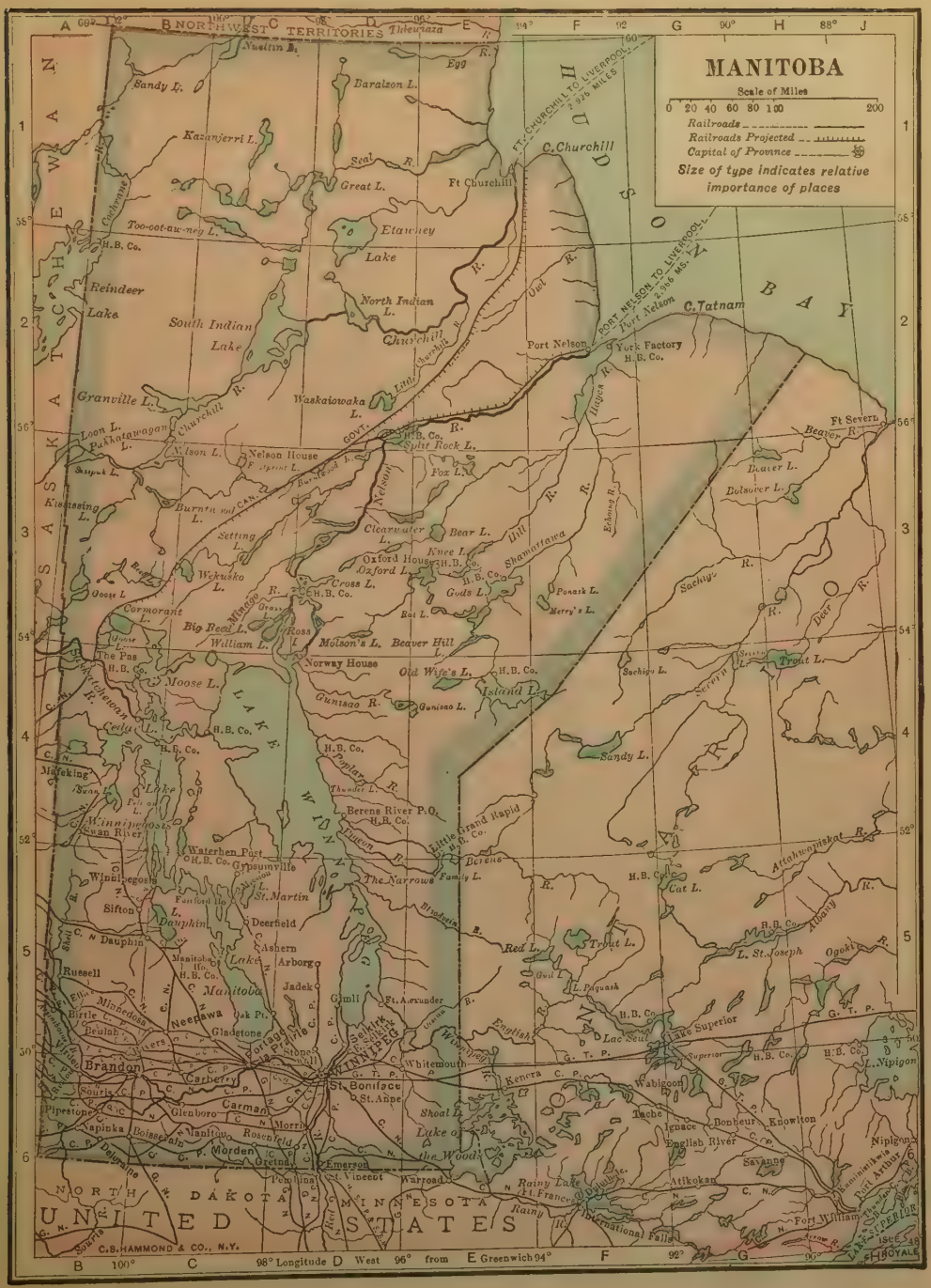
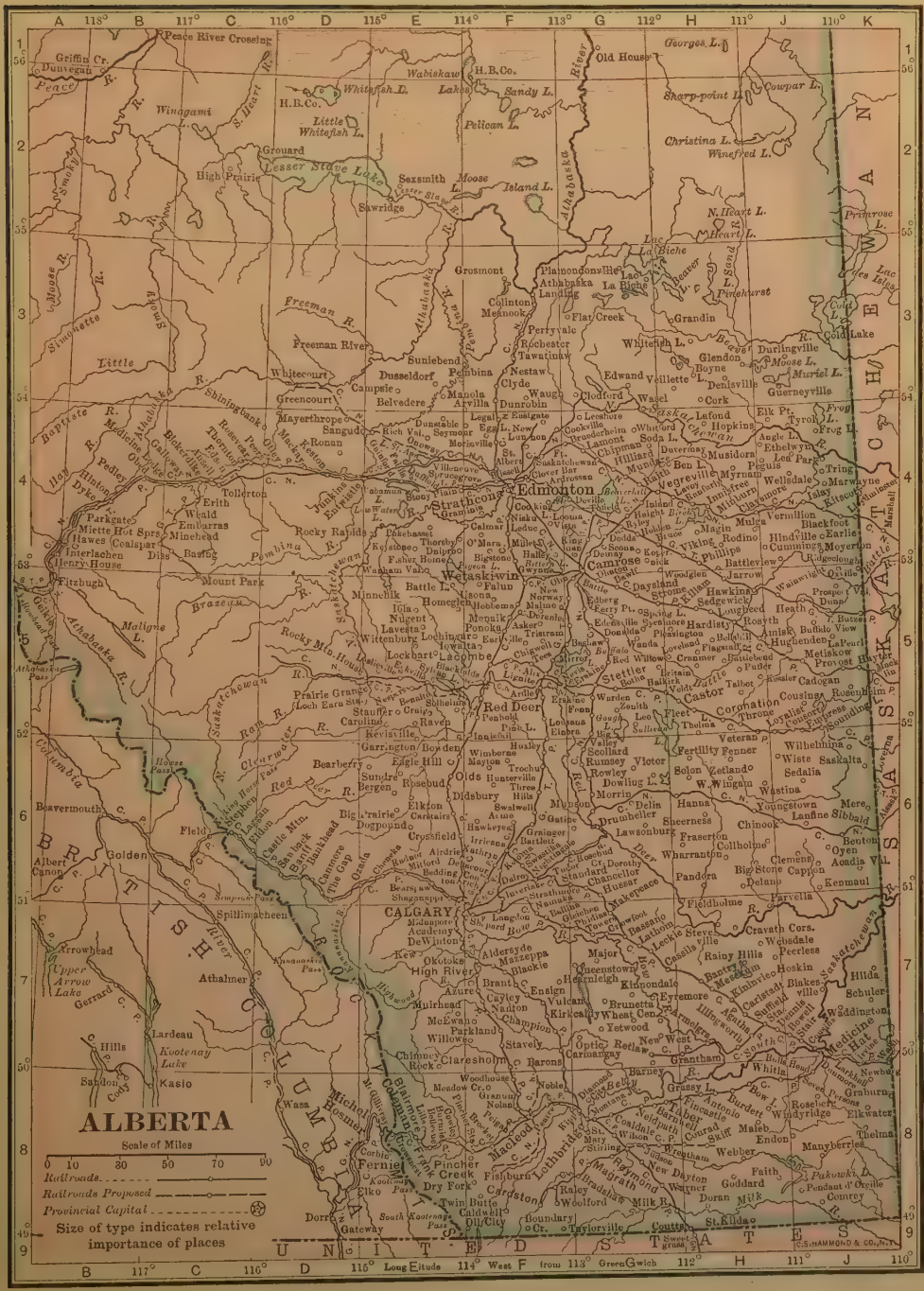

Longitude
Manitoba
Ontario
Minnesota
Wisconsin
Michigan
Lake Superior
Lake Michigan
Winnipeg
Selkirk
St. Boniface
Fort William
Port Arthur
Duluth
Superior
Sault Ste. Marie
Sault Ste.
St. Cloud
Rainy River
Lake of the Woods
Nipigon Forest Reserve
Quetico Forest Reserve
Isle Royale
Apostle Is.
Michipicoten I.
Slate Is.
Manitou I.
Caribou I.
Nelson R.
Hayes R.
Churchill R.
Severn (Fr. Severn) R.
Winisk R.
Attawapiskat R.
Albany R.
Kenogami R.
Ogoki R.
Pic R.
Nipigon R.
Black Bear R.
Sachigo L.
Sachigo R.
Sturgeon L.
Bulstrode L.
Trout L.
Otter L.
Wapikopa L.
Pakhoan L.
Cedar L.
Whitestone L.
Kabunea L.
Lansdowne L.
Favourable L.
Sandy L.
Deer L.
Gunisao L.
Island L.
Big Black R.
Norway House
Molson L.
Rossville
Oxford House
Oxford L.
Knee L.
Gods L.
Merry L.
Fox L.
Fox R.
Bear L.
Squiwisk L.
Pipestone L.
Crooked L.
Red L.
Trout L.
Birch L.
Cat L.
Lac Seul
Wilson L.
Goose L.
Fakenham L.
Long Legged L.
Medicine Stone L.
Ft. Alexander
Ft. Hope
Albany
Osnaburgh H.
Whitewater L.
Whitefish L.
Whitewater R.
Whitefish R.
Cat R.
Williams L.
Zhiski L.
Kagiansquasi R.
Mimiwish L.
Wapikopa R.
Winisk L.
Severn L.
Hawley L.
Dinsley L.
Bulstrode L.
Sturgeon L.
Sachigo R.
Monsonshi L.
Fawn R.
Severn R.
Winisk R.
Shamattawa R.
Attawapiskat R.
Ekwan


ONTARIO
Northern Part
SCALE OF MILES
0 25 50 100 150
120 MILES TO THE INCH
Forest Reserves
National Parks
Indian Reserves
Dominion Capital
County Seats
16 83° 17 82° 18 81° 19 80° 20 79° 21 78° 22 77° 23 76° 24 75° 25 74° 26 73° 27 72° 28 71° 29 70°
A 55° B 54° C 53° D 52° E 51° F 50° G 49° H 48° J 47° K 46° L 45°
Greenwich
N. BELCHER IS.
ANDERSON
ROSS
BELANGER
Clearwater L.
Little Whale R.
Great Whale R.
HUDSON BAY
BELCHER IS.
C. Henrietta Maria
LONG I.
C. Jones
BEAR I.
Opinnagau R.
Ft.George
Big R.
Suggaanstuk R.
JAMES BAY
SPENCER
N. TWIN
S. TWIN
AKIMISKI I.
Eye L.
Opinnake R.
East Main R.
ALBANY I.
Ft. Albany
CHARLTON I.
Nomansland Pt.
East Main
Hannah Bay
Rupert R.
Rupert House
Nemiskau L.
Sand L.
Lake Mistassini
Moose Factory
Moose R.
L. Evans
Missisagami R.
Long L.
Lady Beatrice L.
Nipissing
Mattagami R.
L. Mattagami
Grull L.
L. Opiscotis
Wawagosic R.
Mistassini R.
L. St. John
St. Felicien
Pointe Bleue
Roberval
Shabogama L.
Assiwigan L.
Barnard
Dismal
NAT. T.
Cochrane
Bourkes
Cobalt
Kenabeek L.
Mont Laurier
Shawenegan L.
FOREST RESERVE
MISSISAGI FOREST RESERVE
North Bay
Callander
Trout L.
Pembroke
Mattawa
Nipissing
Joliette
Montreal
Ottawa
Gracefield
Buckingham
Arnprior
Renfrew
Carleton Pl.
Smiths Falls
Kingston
NEW YORK
VT.
Lake Huron
Manitoulin I.
Fitzwilliam I.
Georgian Bay
Main Channel
North Channel
Killarney
Sturgeon R.
Key R.
Shawanaga
Depot Harbor
Parry Sound
Tobermory
Pt. Au Baril
Trout Cr.
South R.
White Fish
Sturgeon R.
Lake Nipissing
Lake Temiskaming
Lake Timagami
Lake Temagami
Lake Wahnapitae
Lake Penage
Lake Wanapitei
Lake Nipissing
Lake Nosbonsing
Lake Kakabeka
Lake Kawagama
Lake Kamaniskeg
Lake Opeongo
Lake Clear
Lake Muskoka
Lake Rosseau
Lake Joseph
Lake Vernon
Lake Kashagawigamog
Lake Buckhorn
Lake Chemong
Lake Scugog
Lake Simcoe
Lake Couchiching
Lake Nipissing
Lake Temiskaming
Lake Timagami
Lake Temagami
Lake Wahnapitae
Lake Penage
Lake Wanapitei
Lake Nipissing
Lake Nosbonsing
Lake Kakabeka
Lake Kawagama
Lake Kamaniskeg
Lake Opeongo
Lake Clear
Lake Muskoka
Lake Rosseau
Lake Joseph
Lake Vernon
Lake Kashagawigamog
Lake Buckhorn
Lake Chemong
Lake Scugog
Lake Simcoe
Lake Couchiching

ONTARIO
(CENTRAL PART)
Railroads
Railroads Projected
Scale of Miles
0 10 20 30 40 50 60 70 80
Size of type indicates relative importance of places
LOWER WESTERN PART OF ONTARIO
Scale of Miles
C.S.Hammond & Co., N.Y.
Longitude West from Greenwich
NORTH CHANNEL
GEORGIAN BAY
LAKE HURON
LAKE ONTARIO
LAKE ERIE
LAKE MICHIGAN
LAKE SUPERIOR
QUEBEC
NEW YORK
PENN.
OHIO
MICH.
Sault Ste. Marie
Sudbury
Ottawa R.
Lake Nipissing
Lake Simcoe
TORONTO
Niagara R.
St. Catharines
Buffalo
Detroit
Pembroke
Ottawa
Kingston
Watertown
Ogdensburg
Brockville
Belleville
Peterborough
Lindsay
Barrie
Orillia
Collingwood
Owen Sound
Goderich
Stratford
Berlin
Galt
Guelph
Hamilton
Port Credit
Oshawa
Whitby
Cobourg
Port Hope
Trenton
Napanee
Gananoque
Cornwall
Grand Manitoulin Island
Georgian Bay
Saginaw Bay
Grand Stone City
Harbor Beach
Bay City
Flint
Detroit
Windsor
Chatham
Sarnia
Port Huron
St. Clair R.
Lake St. Clair
Lake Erie
Pt. Dover
St. Thomas
London
Woodstock
Brantford
Niagara Falls
Welland
Thorold
Dunnville
Port Colborne
Pt. Colborne
Erie
Chautauqua L.
Lake Chautauqua
Lake Temiscaming
Lake Nipissing
Lake Abitibi
Lake Timiskaming
Lake Kippewa
Lake Kamaniskeg
Lake Nosbonsing
Lake Wahnapitae
Lake Penage
Lake Wanapitei
Lake Manitou
Lake Mississagi
Lake Wabuno
Lake Wakomata
Lake Temagami
Lake Obabika
Lake Matachewan
Lake Kenogamisis
Lake Kenogami
Lake Abitibi
Lake Mattagami
Lake Missinaibi
Lake Nagagami
Lake Kapuskasing
Lake Opasatika
Lake Frederick House
Lake Kesagami
Lake Abitibi
Lake Mattagami
Lake Missinaibi
Lake Nagagami
Lake Kapuskasing
Lake Opasatika
Lake Frederick House
Lake Kesagami
Lake Winnipeg
Lake Winnipegosis
Lake Manitoba
Lake of the Woods
Lake Superior
Lake William
Lake Nipigon
Lake Nipigon
Lake Nipigon


MANITOBA
Scale of Miles
0 20 40 60 80 100 200
Railroads
Railroads Projected
Capital of Provnce
Size of type indicates relative importance of places
NORTHWEST TERRITORIES
SASKATCHEWAN
HUDSON BAY
LAKE WINNIPEG
UNITED STATES
NORTH DAKOTA
MINNESOTA
Tideriaza
Nueltin L.
Sandy L.
Baralzon L.
Egg R.
Kazanjerri L.
Seal R.
Great L.
Ft Churchill
C. Churchill
Too-cot-au-ney L.
H.B. Co.
Etaweney Lake
Reindeer Lake
South Indian Lake
North Indian L.
Churchill R.
Ussl R.
Granville L.
Waskaiowaka L.
Loon L.
Pukhatawagan
Nelson L.
Nelson House
Split Rock L.
Foz L.
Kiskissing L.
Burntwood R.
Setting L.
Clearwater L.
Bear L.
Knee L.
Oxford House
Oxford L.
Wekusko L.
Cross L.
Goose L.
Cormorant L.
Big Reed L.
William L.
Molson's L.
Beaver Hill L.
The Pas
Moose L.
Norway House
Old Wife's L.
Island L.
Gunisao R.
Gunisao L.
Sipiwesk L.
Sandy L.
Manitoba
Lake Winnipegosis
Swan River
Waterhen Post
Gypsumville
Winnipegosis
St. Martin
Sifton
Dauphin
Deerfield
Ashern
Arborg
Russell
Manitoba
Jadek
Gimli
Ft. Alexander
Minnedosa
Neepawa
Oak Pt.
Gladstone
Birtle
Beulah
Portage la Prairie
Brandon
Carberry
Winnipeg
St. Boniface
St. Anne
Pipestone
Glenboro
Carman
Morris
Rosenfeld
Manitou
Napinka
Boissevain
Deloraine
Morden
Greta
Emerson
St. Vincent
Pembina
Warroad
Berens River P.O.
Little Grand Rapid
Berens
The Narrows
Family L.
Thunder L.
Pemptem R.
Dauphin R.
Bladder R.
Red L.
Trout L.
Owl L.
Paquash
L. St. Joseph
Albany R.
Attawapiskat R.
Cat L.
Lac Seul
Lake Superior
Whitemouth
Whitemouth R.
English R.
Kenora
Wabigoon
Nipigon
Ignace
Bonheur
Knowlton
English River
Savanne
Atikokan
Rainy Lake
Rainy R.
Fort William
Port Arthur
Nipigon
Thunder Bay
Ft. Churchill to Liverpool 3,926 Miles
Port Nelson to Liverpool 2,956 Miles
Port Nelson
C. Tatnam
York Factory H.B. Co.
Ft Severn
Beaver R.
Dauer L.
Dalsover L.
Sachigo R.
Sachigo L.
Deer R.
Trout L.
Ponask L.
Merry's L.
Gods L.
Shamattawa
Lidli R.
Echoing R.
Ungava R.
Severn R.
Albany R.
Ogoki R.
Lake Superior
Isle Royale
C.S. HAMMOND & CO., N.Y.
98° Longitude West 96° from Greenwich

SASKATCHEWAN
Scale of Miles
0 10 30 50 70 90
Railroads
Railroads Proposed
Provincial Capital
Size of type indicates relative importance of places
Saskatoon
Moose Jaw
Swift Current
Prince Albert
N. Battleford
Battleford
Rosthern
Weyburn
Estevan
Regina
Indian Head
Wolseley
Yorkton
Melville
Kamsack
Hudson Bay
Flin Flon
Reindeer L.
Granville L.
Deep Bay
Loon L.
Pukkatawagan
Doctor L.
Sisipuk L.
Nakina-Anak L.
Kisissing L.
Athapapayakow L.
Goose L.
Namew L.
Cumberland L.
Cumberland House
Pelican Narrows
Manawan L.
Churchill R.
Woody L.
Trout Bay
Mirond L.
Lucky Lonche
Deschambault L.
Wapawekka L.
Amisk L.
Suggi L.
Wolf R.
Moose L.
Bow L.
Trout L.
Potato L.
Lac la Ronge
Nemeiben L.
Black Bear I. L.
Dead L.
Otter L.
Stanley
Foster Lakes
Pine L.
Porter L.
Primeau L.
Knee L.
Sandy L.
Ile a la Crosse L.
Snake L.
Buffalo L.
Clear L.
Winefred L.
Canoe L.
Primrose L.
Waterhen L.
Lac des Isles
Dore L.
Smoothstone L.
Wahkaw L.
Sled L.
Green Lake
Beaver R.
Meadow L.
Onion L.
Pitt
Turtle L.
Spruce Bluff
Big River
Budmin
Dumble
Chitek L.
Waskesiu L.
Waskwasin L.
Bittern L.
Candle L.
Mossy R.
Torch R.
Carrot R.
Whitefox R.
Mistikwan L.
Makwa R.
Green L.
Cowan L.
De Laronde L.
Cream L.
Montreal L.
Lac la Plonge
Lac la Ronge
Potato L.
Trout L.
Bow L.
Moose L.
Wapawekka L.
Wolf R.
Suggi L.
Amisk L.
Goose L.
Namew L.
Cumberland L.
Cumberland House
Pelican Narrows
Manawan L.
Churchill R.
Woody L.
Trout Bay
Mirond L.
Lucky Lonche
Deschambault L.
Nemeiben L.
Black Bear I. L.
Dead L.
Otter L.
Stanley
Foster Lakes
Pine L.
Porter L.
Primeau L.
Knee L.
Sandy L.
Ile a la Crosse L.
Snake L.
Buffalo L.
Clear L.
Winefred L.
Canoe L.
Primrose L.
Waterhen L.
Lac des Isles
Dore L.
Smoothstone L.
Wahkaw L.
Sled L.
Green Lake
Beaver R.
Meadow L.
Onion L.
Pitt
Turtle L.
Spruce Bluff
Big River
Budmin
Dumble
Chitek L.
Waskesiu L.
Waskwasin L.
Bittern L.
Candle L.
Mossy R.
Torch R.
Carrot R.
Whitefox R.
Mistikwan L.
Makwa R.
Green L.
Cowan L.
De Laronde L.
Cream L.
Montreal L.
Eldred
Debden
Polworth
Paddockwood
Henribourg
Ravine Bank
Otosquen
Cantyre
Turnberry
Chemong
Cekal
Ninawin
Ditton Park
Spooner
Ft. a la Corne
Mouse L.
Saskatchewan R.
Prince Albert
Shell Brook
Mooswa
Crutwell
Hoodoo
Omega
Boutin
Birch L.
Medstead
Edam
Marshall
Lashburn
Wasecn
Birling
Carruthers
Meota
Mullingar
Kilwinning
Houston
Macdowall
Caldwell
St. Louis
Melfort
Dorintyny
Crooked R.
Tisdale
Pleasant Valley
Star City
Arborfield
Wapella
Wadena
Wynyard
Quill Lake
Leroy
Lanigan
Watrous
Young
Radisson
Rosthern
Julien
St. Brieux
Twickenham
Sylvania
Pleasantdale
Leofranco
Pilger
Bremen
Humboldt
Daylesford
Dahlton
Lac Vert
Beauchamp
Farmingdale
Fosston
Nut Mountain
Bjorkdale
Orpington
Strand
Watson
Peterson
Burr
Rutter
Plunkett
Laird
Langham
Dundurn
Hanley
Radnor
Nokomis
Simpson
Imperial
Stalwart
Liberty
Duval
Govan
Cymric
Scrath
Magyar
Enid
Goodeve
Strassburg
Southey
Orkney
Lipton
Kelliher
Kuroki
Yellow Grass
Grayson
Sintaluta
Wolseley
Broadview
Grenfell
Moosomin
Wapella
Arcola
Carlyle
Oxbow
Estevan
Bienfait
Outram
Roche Percee
Taylorton
Portal
Flaxton
Glen Ewen
Wauchope
Wordsworth
Weyburn
Yeoman
Abbott
Radville
Gladmar
Bangsund
Neptune
Maxim
Malvern
Hitchcock
Carlyle
Gainsborough
Harptree
Hart
Fife Lake
Big Muddy L.
Fairlawn
Mt. Green
Ardill
Milestone
Lang
Parry
Pense
Grand Coulee
Balgonie
Pilot Butte
Edgeley
Lumsden
Craven
Disley
Dilke
Francis
Cedoux
Lewvan
Tyvan
Windthorst
Kennedy
Dunmore
Walpole C.
Mitchellton
Grace L.
Ormiston
Dayroyd
Readlyn
Viceroy
Ogema
Glenavon
Pangman
Forward
Gravelbourg
Melaval
Limerick
Willow
Mullaney
Ratenville
Lidgett
Milly
Corinne
Wallard
Bellium
Lone Star
Hazenmore
Westerleigh
Chaumley
Cloverley
Claydon
Amelia
Echo
Wildville
Canuck
Nashlyn
Govenlock
Rosethorn
Eastbrook
Southview
Willowvale
Helland
Corinder
Frenchman R.
Wood R.
Old Wives L.
Chaplin L.
Reed L.
Johnston L.
Dunkirk
Avonlea
Parkbeg
Aneroid
Cadillac
Georgina
Cypress
Neubergh
Maple Creek
Cardell
Mackid
Pinto
Neville
Illerbrun
Pembrun
Gull Lake
Bigstick L.
Kuest
Wymark
Bluntzer
Neldath
Coderre
Marx
Tuso
Rowley
Crestwynd
Archive
Antelope
Diana
Tilney
Kronau
Odessa
Vibank
Kendal
Dawson
Wolseley
Sedley
Candiac
Francis
Jasmin


ALBERTA
Scale of Miles
0 10 30 50 70 90
Railroads
Railroads Proposed
Provincial Capital
Size of type indicates relative importance of places
Edmonton
Calgary
Wetaskiwin
Red Deer
Strathcona
Stettler
Castor
Camrose
Lethbridge
Medicine Hat
Peace River Crossing
Griffin Cr.
Dunvegan
Wabiskaw
H.B.Co.
Whitefish L.
Lesser Slave Lake
Sawridge
Sexsmith
Grouard
High Prairie
Winagami L.
Little Whitefish L.
Sandy L.
Pelican L.
Old House
Georges L.
Sharp-point L.
Cowpar L.
Christina L.
Winefred L.
N. Heart L.
Heart L.
Primrose L.
Lac La Biche
Grosmont
Plamondon
Athabaska Landing
Colinton
Meanook
Flat Creek
Grandin
Whitefish L.
Cold Lake
Durlingville
Glendon
Boyne
Moose L.
Muriel L.
Denlaville
Cork
Guerneyville
Elk Pt.
Tyrrell L.
Frog L.
Lafond
Hopkins
Angle L.
Ethelwyn L.
Leo Park
Tring
Wellsdale
Marwayne
Kitscoty
Vermilion
Blackfoot
Mulga
Hindville
Earlie
Cummings
Meyerton
Ridgevalley
Battleview
Phillips
Viking
Rodino
Jarrow
Hawkins
Sedgewick
Lougheed
Heath
Hardisty
Rosyth
Amisk
Buffalo View
Hughenden
LaPerle
Metiskow
Provost
Hayter
Veteran
Fleet
Coronation
Throne
Loyalist
Consort
Empress
Bounding
Cadogan
Cousins
Rosenheim
Wilhelmina
Waiste
Saskalta
Sedalia
Westina
Youngstown
Mere
Lanfine
Sibbald
Beiseker
Oyen
Acadia Val.
Keemaul
Clemens
Big Stone Coppon
Delamp
Fraserton
Chinook
Wharranton
Pandora
Fieldholme
Farrella
Cravath
Cora
Wendale
Eerless
Rainy Hills
Hoskin
Hilda
Schuler
Waddington
Medicine Hat
Redcliff
Irvine
Walsh
Seven Persons
Elkwater
Thelma
Manyberries
Endon
Maleb
Conrad
Webber
Faith
Goddard
Doran
Milk R.
Pakowki L.
Pendant d'Oreille
Conrey
Warner
Raley
Carstone
Woolford
Twin Butte
Dry Fork
Pincher Creek
Fernie
Elko
Dorritz
Gateway
Kootenay Pass
South Kootenay Pass
Crowsnest Pass
Michel
Hosmer
Corbin
Wasa
Sandon
Cody
Kaslo
Hills
Lardeau
Kootenay Lake
Arrowhead
Upper Arrow Lake
Gerrard
Athalmer
Spillimacheen
Golden
Albert Canon
Field
Beavermouth
Donald
Glacier
Revelstoke
Illecillewaet
Albert Canon
Stephen
Laggan
Lake Louise
Banff
Canmore
Exshaw
Morley
Gleichen
Bassano
Brooks
Suffield

BRITISH COLUMBIA
(Northwestern Part)
Same Scale as Main Map
NORTHWEST TERRITORIES
YUKON TERRITORIES
Campbell Mts.
Mt. Billings
Simpson Mts.
Frances L.
East Arm
Land
Height
Liard River
Trout L.
Ft. Liard
Lower Post
Centreville
McDame
Tuya L.
Potter
Dease L.
Lakelon
Iskut River
Iskut L.
Stikine Mts.
Echo Lake
Fork Creek
Nass River
Bowser L.
Stewart
Kuldo
Kitkargas
Maple Bay
Granby Bay
Ayansh
Kispiox
Hazelton
Kitwanga
Kitselas
Ritchie
Seaton
Terrace
Port Essington
Metlakatla
Inverness
Prince Rupert
Digby I.
Skeena R.
Babine
Tacla L.
Nechako R.
Stuart R.
Fraser R.
Parsnip R.
Peace R.
Pine R.
Liard R.
Nelson R.
Black R.
Kechika R.
Sikanni Chief R.
Ingenika R.
Thutade L.
Sifton Pass
Fishing Pass
Laurier Pass
Carruthers Mt.
Mesilinka R.
Ft. Grahame
Ft. St. John
Peace River Block
Hudsons Hope
Dominion Govt
Chowade L.
Halfway R.
Beatton R.
Rocky Mountain Portage
Mt. Selwyn
Gerlansen
Manson
New Hogem
Mahson L.
Pine Pass
Hunter Pk.
Ft. McLeod
McLeod L.
Beaver Lake
Inzana
Tremblay L.
Chowaton L.
Chuchi L.
Natowin L.
Kwata L.
Nation R.
Omineca R.
Bear L.
Babine Mts.
Babine Range
Nass Harbor
Arrandale
Portland Canal
Portland Inlet
Observatory Inlet
Pearse I.
Alice Arm
Anyox
Granby Bay
Boundary
Wrangell
Stikine R.
Iskut R.
Telegraph Creek
Glenora
Tahltan
Egnell
Nahlin
Taku R.
Tulsequah
Juneau
Taku Inlet
Gastineau Channel
Douglas I.
Admiralty I.
Chatham Strait
Kruzof I.
Sitka
Sitka Sound
Baranof I.
Cross Sound
C. Cross
Chichagof Island
Glacier Bay
Lynn Canal
Haines
Skagway
Chilkoot Pass
Chilkat Pass
Dyea
Bennett
Bennett L.
Carcross
Caribou
Dunedale
Whitehorse
Wigan
Kynsena
Teslin L.
Teslin R.
Marsh L.
Atlin L.
Atlin
Discovery
Fraser
Log Cabin
Tagish
Tagish L.
Nakina
B. Co.
Jonsua
Mt. Fairweather
Fairweather Range
Glacier Bay
Yakutat Bay
Dry Bay
Alsek R.
Tatshenshini
Raid Hollow
L. Kluane
Duke I.
Prince of Wales I.
Iphigenia B.
Quadra
Coronation I.
C. Ommaney
Kupreanof I.
Kuiu I.
Frederick Sd.
Stephens Passage
Chatham Sd.
Portland Canal
Observatory Inlet
Nass Harbor
Arrandale
Inter-National Boundary
Alaska
Brit. Columbia
Pacific Ocean
Yukon
Alaska
Atlantic Ocean

BRITISH COLUMBIA
SCALE OF MILES
0 10 20 40 60 80 100
Railroads
Railroads Proposed
Capitals
Size of type indicates relative importance of places
Hammond's 7 x 10 Map of British Columbia.
Copyright 1913, by C.S. Hammond & Co., N.Y.
PACIFIC OCEAN
STRAIT OF GEORGIA
QUEEN CHARLOTTE ISLANDS
VANCOUVER ISLAND
UNITED STATES
WASHINGTON
IDAHO
MONTANA
ALBERTA
Victoria
Vancouver
New Westminster
Nanaimo
Esquimalt
Prince Rupert
Kamloops
Kelowna
Cranbrook
Nelson
Revelstoke
Calgary
Spokane
Seattle
Longitude West from Greenwich
B 129° C 128° D 127° E 126° F 125° G 124° H 123° J 122° K 121° L 120° M 119° N 118° O 117° P 116° R 115° S

DOMINION OF CANADA
ALBERTA
BRITISH COLUMBIA
SASKATCHEWAN
MANITOBA
ONTARIO
QUEBEC
NEW BRUNSWICK
MAINE
UNITED STATES
MONTANA
NORTH DAKOTA
MINNESOTA
WASHINGTON
OREGON
IDAHO
WYOMING
SOUTH DAKOTA
WISCONSIN
MICHIGAN
NEBRASKA
IOWA
ILLINOIS
INDIANA
OHIO
NEVADA
UTAH
COLORADO
KANSAS
MISSOURI
KENTUCKY
WEST VIRGINIA
VIRGINIA
NEW YORK
PENNSYLVANIA
CALIFORNIA
ARIZONA
NEW MEXICO
OKLAHOMA
ARKANSAS
TENNESSEE
NORTH CAROLINA
SOUTH CAROLINA
GEORGIA
ALABAMA
MISSISSIPPI
LOUISIANA
TEXAS
FLORIDA
SONORA
CHIHUAHUA
COAHUILA
DURANGO
MEXICO
GULF OF MEXICO
PACIFIC OCEAN
ATLANTIC OCEAN
Edmonton
Calgary
Lethbridge
Regina
Saskatoon
Winnipeg
Lake Winnipeg
Lake Winnipegosis
Brandon
Kenora
Port Arthur
Fort William
Lake Superior
Sault Ste. Marie
Sudbury
North Bay
Ottawa
Montreal
Quebec
Riviere du Loup
James Bay
L. Nipigon
Lake of the Woods
Rainy R.
Albany R.
St. Lawrence R.
Vancouver
Victoria
Nanaimo
New Westminster
Revelstoke
Nelson
Kootenay R.
Columbia R.
Fraser R.
Seattle
Everett
Tacoma
Olympia
Spokane
Walla Walla
Yakima
Wenatchee
Portland
Astoria
Salem
Eugene
Roseburg
Coos Bay
Grants Pass
Medford
Klamath Falls
The Dalles
Pendleton
Baker City
Huntington
Boise
Caldwell
Nampa
Twin Falls
Pocatello
Idaho Falls
Great Falls
Missoula
Helena
Butte
Billings
Missouri R.
Yellowstone R.
Yellowstone Nat. Park
Sheridan
Grand Forks
Bismarck
Fargo
Devils Lake
Minot
Williston
Aberdeen
Pierre
Deadwood
Rapid City
Sioux Falls
Mitchell
Huron
Watertown
Minneapolis
St. Paul
Duluth
Marquette
Menominee
Escanaba
Manistique
Sault Ste. Marie
Cheboygan
Alpena
Saginaw
Bay City
Flint
Port Huron
Detroit
Toronto
Hamilton
Niagara Falls
Buffalo
Rochester
Syracuse
Albany
Utica
Boston
Portland
Worcester
Springfield
Hartford
New Haven
Providence
Newport
Fall River
New York
Philadelphia
Baltimore
Washington
Pittsburg
Cleveland
Akron
Toledo
Sandusky
Lake Erie
Lake Michigan
Lake Huron
Lake Ontario
Chicago
Milwaukee
Madison
Green Bay
Racine
Kenosha
Oshkosh
Manitowoc
Sheboygan
La Crosse
Winona
Rochester
Mankato
Ft. Dodge
Dubuque
Des Moines
Council Bluffs
Davenport
Clinton
Cedar Rapids
Iowa City
Omaha
South Omaha
Council Bluffs
Lincoln
Nebraska City
Beatrice
Hastings
Grand Island
North Platte
Sioux City
Yankton
Kansas City
St. Joseph
Atchison
Leavenworth
Topeka
Jefferson City
St. Louis
Springfield
Cairo
Joplin
Quincy
Peoria
Bloomington
Decatur
Springfield
Jacksonville
Alton
East St. Louis
Evansville
Indianapolis
Terre Haute
Fort Wayne
South Bend
Lima
Canton
Akron
Youngstown
Zanesville
Columbus
Dayton
Springfield
Cincinnati
Louisville
Frankfort
Lexington
Ohio R.
Wheeling
Parkersburg
Charleston
Huntington
Richmond
Roanoke
Norfolk
Newport News
Chesapeake Bay
Petersburg
Lynchburg
Harrisonburg
Staunton
Winchester
Hagerstown
Chambersburg
Harrisburg
Lancaster
Reading
Allentown
Bethlehem
Easton
Scranton
Wilkesbarre
Binghamton
Elmira
Corning
Rochester
Albany
Troy
Schenectady
Utica
Syracuse
Oswego
Watertown
Ogdensburg
Plattsburg
Burlington
Montpelier
Concord
Manchester
Nashua
Portsmouth
Dover
Augusta
Bangor
Portland
Lewiston
Auburn
Rockland
Belfast
Eastport
Calais
Saint John
Fredericton
Moncton
Halifax
Sydney
Charlottetown
Prince Edward Island
Riviere du Loup
Sherbrooke
Quebec
Three Rivers
Montreal
Ottawa
Kingston
Peterboro
Toronto
Hamilton
Niagara Falls
Brantford
London
Windsor
Sarnia
Owen Sound
Collingwood
Barrie
Orillia
Parry Sound
North Bay
Sudbury
Sault Ste. Marie
Manitoulin
Lake Superior
Port Arthur
Fort William
Kenora
Winnipeg
Brandon
Portage la Prairie
Regina
Moosejaw
Prince Albert
Saskatoon
Battleford
Edmonton
Calgary
Lethbridge
Medicine Hat
Red Deer
Banff
Revelstoke
Kamloops
Vancouver
Victoria
Nanaimo
New Westminster
Prince Rupert
Port Simpson
Queen Charlotte Islands
Vancouver Island
Strait of Juan de Fuca
Strait of Georgia
Puget Sound
Gulf of California
Lower California
Sierra Madre
Rio Grande
Colorado R.
Gila R.
Pecos R.
Red R.
Arkansas R.
Mississippi R.
Ohio R.
Missouri R.
Platte R.
Snake R.
Columbia R.
Fraser R.
Yellowstone R.
Saskatchewan R.
Albany R.
St. Lawrence R.
Ottawa R.
Hudson Bay
Great Salt Lake
Salt Lake City
Ogden
Provo
Logan
Carson City
Virginia City
Reno
Winnemucca
Elko
Ely
Tonopah
Goldfield
Las Vegas
Pioche
Eureka
Austin
Battle Mountain
Lovelock
Humboldt R.
Truckee R.
Sacramento
San Francisco
Oakland
Berkeley
San Jose
Stockton
Modesto
Fresno
Visalia
Bakersfield
Santa Barbara
Los Angeles
San Bernardino
San Diego
Pasadena
Riverside
Redlands
Santa Ana
Long Beach
Santa Barbara Islands
Denver
Colorado Springs
Pueblo
Cripple Creek
Leadville
Aspen
Grand Junction
Durango
Trinidad
Las Animas
Arkansas R.
Dodge City
Wichita
Topeka
Kansas City
Leavenworth
Atchison
Lawrence
Emporia
Hutchinson
Salina
Abilene
Manhattan
Junction City
Fort Riley
Fort Leavenworth
Fort Scott
Parsons
Coffeyville
Independence
Chanute
Iola
Neosho R.
Cimarron R.
Santa Fe
Albuquerque
Las Vegas
Raton
Amarillo
Clayton
Tucumcari
Roswell
Carlsbad
Pecos R.
Rio Grande
Gila R.
Williams
Phoenix
Prescott
Yuma
Tucson
Nogales
Douglas
Bisbee
Globe
Florence
Casa Grande
Maricopa
Colorado R.
Oklahoma
Guthrie
Fort Smith
McAlester
Hot Springs
Little Rock
Pine Bluff
Arkansas R.
Red R.
Wichita Falls
Texarkana
Shreveport
Vicksburg
Jackson
Meridian
Dallas
Fort Worth
Waco
Houston
Galveston
Austin
San Antonio
San Angelo
El Paso
Laredo
Brownsville
Matamoras
Monterey
Nuevo Leon
Coahuila
Durango
Chihuahua
Sonora
Hermosillo
Guaymas
Sinaloa
Mazatlan
Tepic
Guadalajara
Colima
Manzanillo
Acapulco
Mexico City
Vera Cruz
Tampico
Monclova
Saltillo
Zacatecas
Aguascalientes
San Luis Potosi
Guanajuato
Queretaro
Morelia
Puebla
Oaxaca
Tehuantepec
Yucatan
Campeche
Merida
Progreso
Belize
Tabasco
Chiapas
Guatemala
Salvador
Honduras
Nicaragua
Costa Rica
Panama
Havana
Matanzas
Cienfuegos
Santiago de Cuba
Guantanamo
Cuba
Jamaica
Kingston
Port Royal
Haiti
Port au Prince
Cape Haitien
Santo Domingo
Puerto Rico
San Juan
Ponce
Mayaguez
Arecibo
Caguas
Virgin Islands
St. Thomas
St. Croix
St. John
Bahama Islands
Nassau
Andros Island
Abaco Islands
Eleuthera
San Salvador
Cat Island
Exuma
Long Island
Inagua
Turks Islands
Caicos Islands
Bermuda Islands
Hamilton
St. George
Dry Tortugas
Key West
Tortugas
Florida Keys
Miami
Palm Beach
Fort Lauderdale
Jacksonville
St. Augustine
Daytona
Tallahassee
Apalachicola
Tampa
Pensacola
Mobile
Montgomery
Birmingham
Atlanta
Macon
Augusta
Savannah
Charleston
Columbia
Wilmington
Charlotte
Raleigh
Greensboro
Winston-Salem
Asheville
Knoxville
Chattanooga
Nashville
Memphis
Paducah
Louisville
Lexington
Frankfort
Cincinnati
Dayton
Springfield
Columbus
Zanesville
Wheeling
Parkersburg
Charleston
Huntington
Roanoke
Lynchburg
Richmond
Petersburg
Norfolk
Newport News
Chesapeake Bay
Cape Hatteras
Cape Fear
Cape Lookout
Cape Henry
Delaware Bay
Chesapeake and Delaware Canal
Delaware R.
Susquehanna R.
Potomac R.
Shenandoah R.
Allegheny R.
Monongahela R.
Kanawha R.
Tennessee R.
Cumberland R.
Cumberland Gap
Appalachian Mts.
Blue Ridge
Alleghany Mts.
Great Smoky Mts.
Mississippi R.
Mouths of the Mississippi R.
Gulf of Mexico
Key West
Tortugas
Florida Keys
Miami
Palm Beach
Fort Lauderdale
Jacksonville
St. Augustine
Daytona
Tallahassee
Apalachicola
Tampa
Pensacola
Mobile
Montgomery
Birmingham
Atlanta
Macon
Augusta
Savannah
Charleston
Columbia
Wilmington
Charlotte
Raleigh
Greensboro
Winston-Salem
Asheville
Knoxville
Chattanooga
Nashville
Memphis
Paducah
Louisville
Lexington
Frankfort
Cincinnati
Dayton
Springfield
Columbus
Zanesville
Wheeling
Parkersburg
Charleston
Huntington
Roanoke
Lynchburg
Richmond
Petersburg
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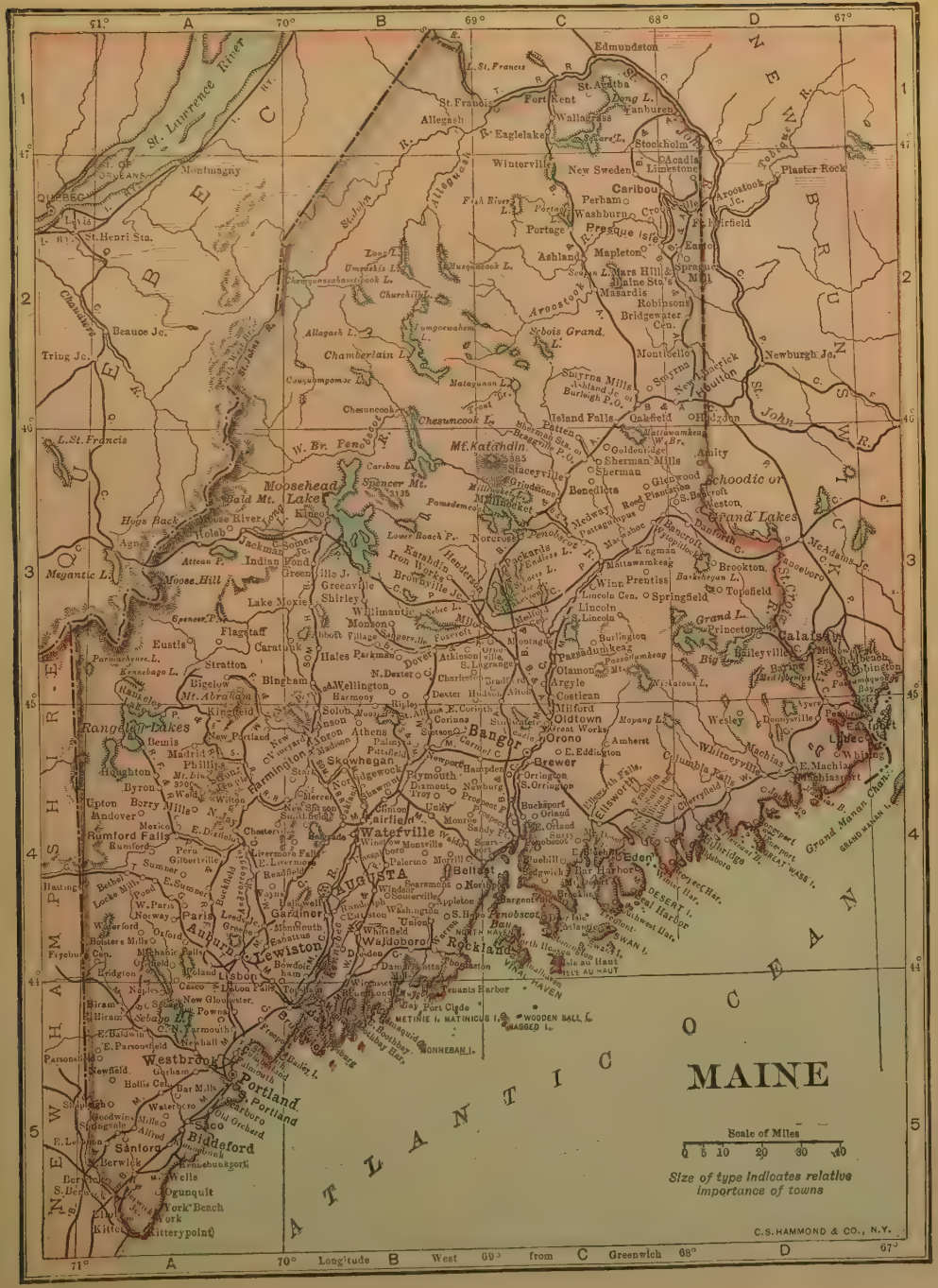
Monongahela R.
Kanawha R.
Tennessee R.
Cumberland R.
Cumberland Gap
Appalachian Mts.
Blue Ridge
Alleghany Mts.
Great Smoky Mts.
Mississippi R.
Mouths of the Mississippi R.
Gulf of Mexico
SCALE OF MILES
0 50 100 150 200
C.S. HAMMOND & CO., N.Y.
Longitude West from Greenwich
128° 120° 112° 104° 96° 88° 80° 72° 64°
A B C D E F G H
1 2 3 4
44 36 28 20


MAINE
ATLANTIC OCEAN
QUEBEC
NEW BRUNSWICK
St. Lawrence River
Scale of Miles
0 5 10 20 30 40
Size of type indicates relative importance of towns
C.S. HAMMOND & CO., N.Y.
Longitude West from Greenwich
Edmundston
Fort Kent
St. Francis
Allegash
Eagle Lake
Wallagrass
Stockholm
Caribou
Presque Isle
Fort Fairfield
Plaster Rock
Wintervill
New Sweden
Perham
Washburn
Portage
Ashland
Mapleton
Mars Hill
Houlton
Masardis
Robinsons
Bridgewater
Monticello
Oakfield
Hodgdon
Newburgh Jc.
Smyrna Mills
Smyrna
Island Falls
Patten
Sherman Mills
Sherman
Benedicta
Millinocket
Medway
Patagonia
Norcross
Katahdin Iron Works
Brownville Jct.
Milo
Brownville
Dover
Foxcroft
Dexter
Corinna
Corinth
Exeter
Charleston
Atkinson
Sangerville
Guilford
Abbot
Monson
Harmony
Ripley
Solon
Anson
Madison
Norridgewock
Skowhegan
Fairfield
Waterville
Winslow
Oakland
Belgrade
Augusta
Hallowell
Gardiner
Farmingdale
Pittston
Dresden
Richmond
Bath
Brunswick
Topsham
Lisbon
Lewiston
Auburn
Mechanic Falls
Poland
Minot
Turner
Livermore Falls
Jay
Canton
Peru
Dixfield
Mexico
Rumford
Rumford Falls
Andover
Upton
Byron
Berry Mills
Wilson
Phillips
Madrid
Kingfield
Stratton
Eustis
Flagstaff
Carrabassett
Bingham
Wellington
Harmony
Moosehead Lake
Kineo
Rockwood
Jackman
Moose River
Holeb
Attean P.
Indian Pond
Somerset Jc.
Green ville J.
Greenville
Shirley
Lake Mozie
Williamantic
Monson
Abbot Village
Sangerville
Foxcroft
Milo
Lincoln
Lincoln Cen.
Springfield
Burlington
Passadumkeag
Olamon
Argyle
Costigan
Milford
Oldtown
Orono
Bangor
Brewer
Hampden
Orrington
Bucksport
Orland
Bucksport
Ellsworth
Franklin
Hancock
Sullivan
Gouldsboro
Winter Harbor
Bar Harbor
Southwest Harbor
Northeast Harbor
Mount Desert I.
Great Duck I.
Frenchboro
Swan I.
Deer Isle
Stonington
Isle au Haut
Penobscot Bay
Penobscot R.
Eggemoggin Reach
Blue Hill
Blue Hill Bay
Sedgwick
Brooklin
Brooksville
Castine
Penobscot
Belfast
Searsmont
Searsport
Stockton
Frankfort
Winterport
Hampden
Newport
Dixmont
Plymouth
Exeter
Corinth
Levant
Kenduskeag
Carmel
Hudson
Alton
Old Town
Milford
Veazie
Orono
Stillwater
Great Works
Penobscot R.
Mattawamkeag
Winn
Prentiss
Lincoln Cen.
Springfield
Topsfield
Brookton
Baskahegan L.
Grand L.
Princeton
Calais
Baileyville
Woodland
Bonsall
Robbinston
Eastport
Lubec
Whiting
Wesley
Dennysville
Pembroke
Machias
Machiasport
Columbia Falls
Jonesport
Grand Manan Chan.
Grand Manan I.
Whitneyville
Moosehead Lake
Spencer Mt.
Bald Mt.
Hogs Back
Attean P.
Moose Hill
Meyantic L.
Chamberlain L.
Allagash L.
Churchill L.
Umsaskis L.
Chesuncook L.
Caribou L.
Mt. Katahdin
W. Br. Penobscot R.
Millinocket L.
Pamadomcook L.
Lower Roach P.
Norcross
Penobscot R.
Mattawamkeag L.
Baskahegan L.
Grand L.
Big Lake
Pleasant R.
Machias R.
Chiputneticook Lakes
Rangeley Lakes
Mt. Abraham
Saddleback
Bigelow
Kennebago L.
Parmachenee L.
Spencer P.
Beaver R.
Androscoggin R.
Androscoggin L.
Umbagog L.
Richardson L.
Aziscohos L.
Lake Parmachenee
Upper Dam
Errol Dam
Rumford
Mexico
Peru
Dixfield
Canton
Livermore
Livermore Falls
Jay
Wilton
Farmington
Chesterville
Temple
Strong
Phillips
Madrid
New Portland
Kingfield
Stratton
Eustis
Flagstaff
Carrabassett
Bingham
Solon
Athens
Harmony
Ripley
Cornville
Skowhegan
Norridgewock
Fairfield
Waterville
Winslow
Oakland
Belgrade
Augusta
Hallowell
Gardiner
Farmingdale
Pittston
Dresden
Richmond
Bath
Brunswick
Topsham
Lisbon
Lewiston
Auburn
Mechanic Falls
Poland
Minot
Turner
Livermore Falls
Jay
Canton
Peru
Dixfield
Mexico
Rumford
Rumford Falls
Andover
Upton
Byron
Berry Mills
Wilson
Phillips
Madrid
Kingfield
Stratton
Eustis
Flagstaff
Carrabassett
Bingham
Wellington
Harmony
Moosehead Lake
Kineo
Rockwood
Jackman
Moose River
Holeb
Attean P.
Indian Pond
Somerset Jc.
Green ville J.
Greenville
Shirley
Lake Mozie
Williamantic
Monson
Abbot Village
Sangerville
Foxcroft
Milo
Lincoln
Lincoln Cen.
Springfield
Burlington
Passadumkeag
Olamon
Argyle
Costigan
Milford
Oldtown
Orono
Bangor
Brewer
Hampden
Orrington
Bucksport
Orland
Bucksport
Ellsworth
Franklin
Hancock
Sullivan
Gouldsboro
Winter Harbor
Bar Harbor
Southwest Harbor
Northeast Harbor
Mount Desert I.
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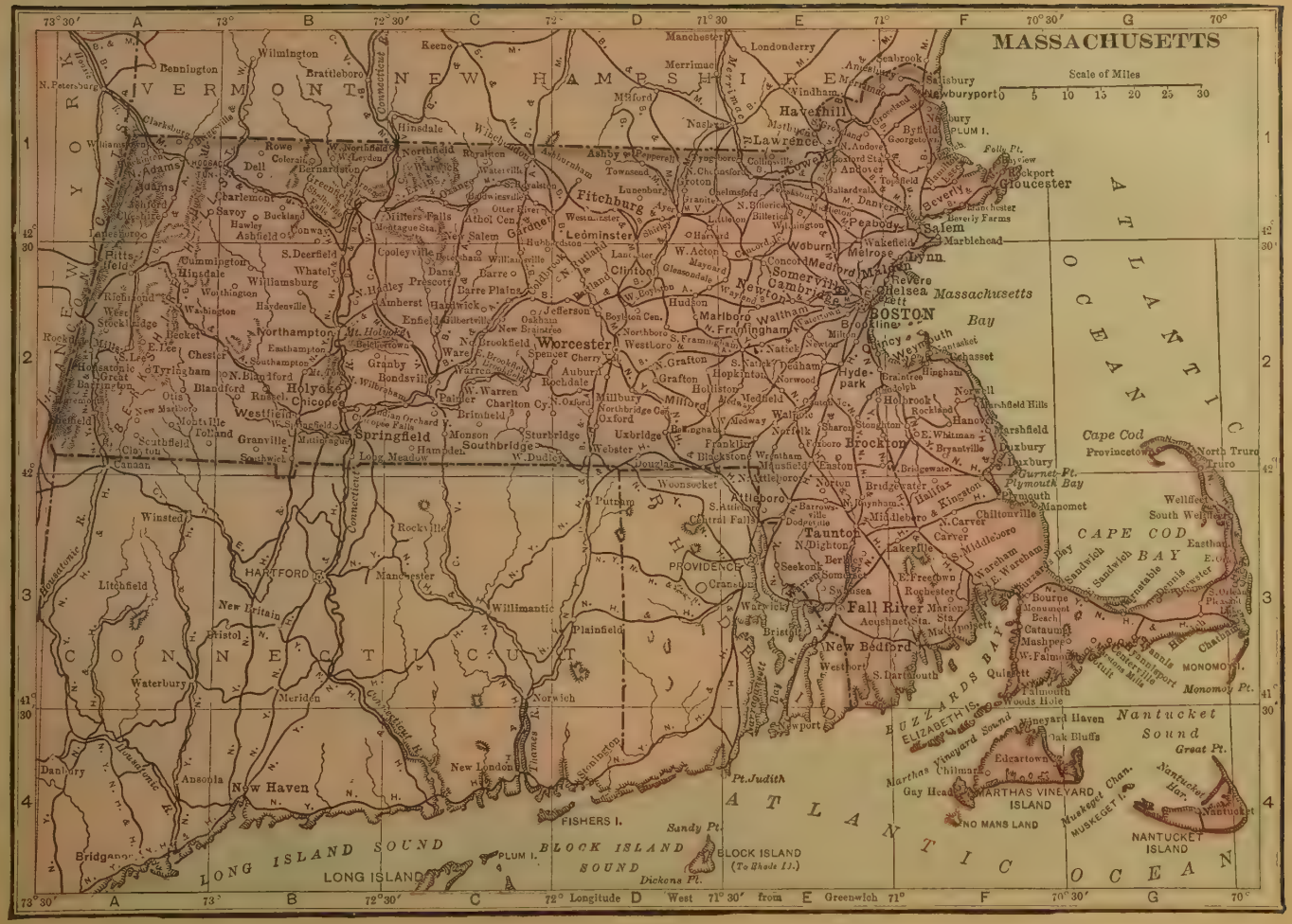
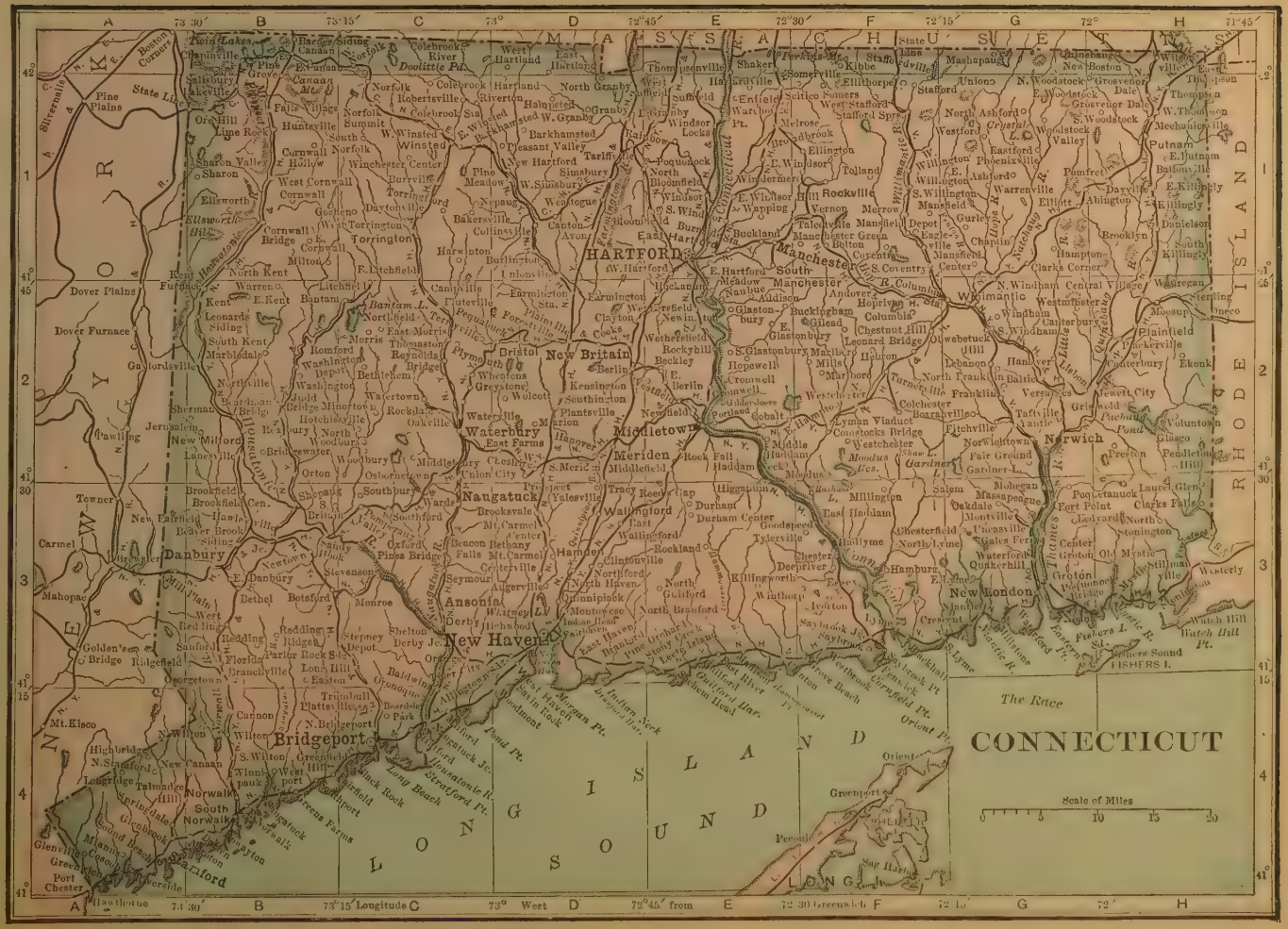
Deer Isle
Stonington
Isle au Haut
Penobscot Bay
Penobscot R.
Eggemoggin Reach
Blue Hill
Blue Hill Bay
Sedgwick
Brooklin
Brooksville
Castine
Penobscot
Belfast
Searsmont
Searsport
Stockton
Frankfort
Winterport
Hampden
Newport
Dixmont
Plymouth
Exeter
Corinth
Levant
Kenduskeag
Carmel
Hudson
Alton
Old Town
Milford
Veazie
Orono
Stillwater
Great Works
Penobscot R.
Mattawamkeag
Winn
Prentiss
Lincoln Cen.
Springfield
Topsfield
Brookton
Baskahegan L.
Grand L.
Princeton
Calais
Baileyville
Woodland
Bonsall
Robbinston
Eastport
Lubec
Whiting
Wesley
Dennysville
Pembroke
Machias
Machiasport
Columbia Falls
Jonesport
Grand Manan Chan.
Grand Manan I.
Whitneyville
Moosehead Lake
Spencer Mt.
Bald Mt.
Hogs Back
Attean P.
Moose Hill
Meyantic L.
Chamberlain L.
Allagash L.
Churchill L.
Umsaskis L.
Chesuncook L.
Caribou L.
Mt. Katahdin
W. Br. Penobscot R.
Millinocket L.
Pamadomcook L.
Lower Roach P.
Norcross
Penobscot R.
Mattawamkeag L.
Baskahegan L.
Grand L.
Big Lake
Pleasant R.
Machias R.
Chiputneticook Lakes
Rangeley Lakes
Mt. Abraham
Saddleback
Bigelow
Kennebago L.
Parmachenee L.
Spencer P.
Beaver R.
Androscoggin R.
Androscoggin L.
Umbagog L.
Richardson L.
Aziscohos L.
Lake Parmachenee
Upper Dam
Errol Dam
Rumford
Mexico
Peru
Dixfield
Canton
Livermore
Livermore Falls
Jay
Wilton
Farmington
Chesterville
Temple
Strong
Phillips
Madrid
New Portland

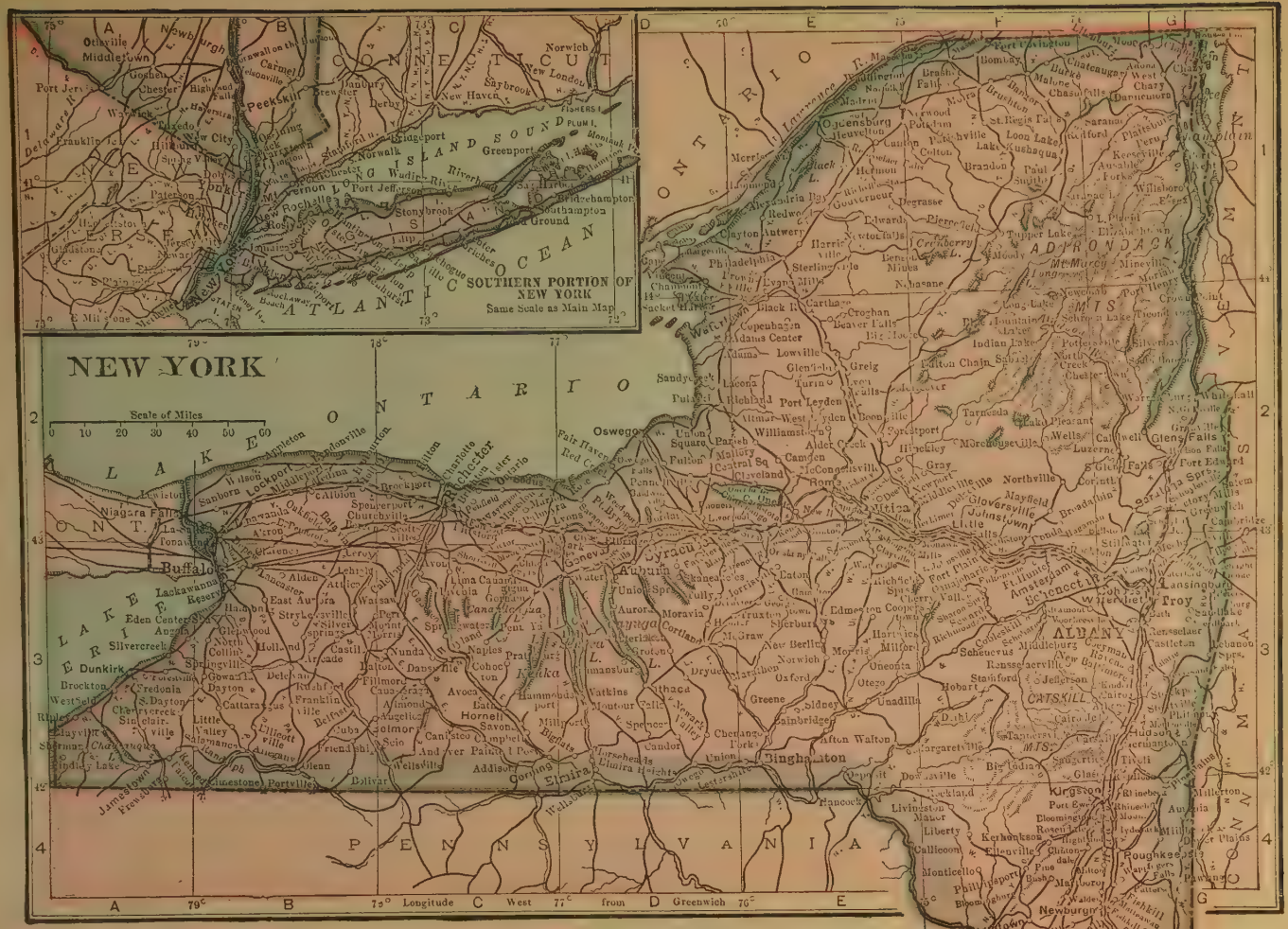
VERMONT
Scale of Miles
0 5 10 20 30
Longitude West from Greenwich
MONTPELIER
Barre
Rutland
Bennington
Brattleboro
Rockingham
CONCORD
Lake Champlain
Connecticut R.
Winooski R.
Otter Creek
Battenkill R.
Deerfield R.
Ashuelot R.
Lake George
Squam L.
Newfound L.
Winnipesaukee
Lake Sunapee
Burlington
St. Johnsbury
Colchester
Essex
Milton
Westford
Fairfax
Fairfield
St. Albans
Enosburg
Richford
Berkshire
Swanton
Isle La Motte
North Hero
Grand Isle
E. Georgia
Sheldon
Highgate
Franklin
Alburg
Derby Line
Newport
Coventry
Island Pond
Norton Mills
Averill
Wallis Jct.
Colebrook
Canaan
Beecher Falls
Lunenburg
Guildhall
Granby
Victory
Lyndonville
Lyndon
Burke
Gallup Mills
Lyndonville
Newark
Brunswick
Lanesboro
Coos
Northumberland
Littleton
Whitefield
Jefferson
Carroll
Danville
Cabot
Peacham
Barnet
Groton
Ryegate
Wells River
Orange
Williamstown
Granite ville
Washington
Newbury
Haverhill
Lincoln
Plymouth
Pompanoosuc
Norwich
Hartford
White River Jct.
Hartland
Windsor
Claremont
Springfield
Chester
Walpole
Westminster
Putney
Keene
Bellows Falls
Saxtons R.
Grafton
Windham
Londonderry
Manchester
Dorset
Rupert
Pawlet
Granville
Hancock
Roxbury
Brookfield
Randolph
Bethel
Royalton
Sharon
Thetford
Strafford
Tunbridge
Chelsea
Bradford
Brookfield
Corinth
Waterbury
Duxbury
Moretown
Waitsfield
Warren
Fayston
Middlesex
Worcester
Calais
Marshfield
Plainfield
Montpelier
Berlin
Middlebury
Bristol
Vergennes
Ferrisburg
Starksboro
Huntington
Hinesburg
Shelburne
Charlotte
Jericho
Richmond
Williston
Essex Jct.
Winooski
Colchester

NEW HAMPSHIRE
Scale of Miles
0 10 20 30 40
A 72° 30′ B 72° C 71° 30′ D 71° E 70° 30′
Longitude 72° West from 71° 30′ Greenwich
Richford
Montgomery
Newport
Fairfield
Cambridge
Morristown
Lyndon
St. Johnsbury
Island Pond
Coos
Stratford
Groveton
Stark
Northumberland
Lancaster
Dixville Notch
Colebrook
Pittsburg
Clarksville
Stewartstown
Second L.
Connecticut L.
Wentworth Location
Columbia
Dixville
Errol
Lakeside
Dummer
W. Milan
Milan
Berlin
Berlin Mills
Gorham
Riverton
Dalton
Jefferson
Scott
Meadows
Whitefield
Waterbury
Barnet
Littleton
Monroe
Lyman
Franconia
Sugar Hill
Lisbon
Bath
Profile
Swiftwater
Flume
Haverhill
Lincoln
E. Haverhill
N. Woodstock
Gilead
Mt. Adams
Mt. Washington
Mt. Clinton
Mt. Jefferson
Mt. Pleasant
Mt. Franklin
Mt. Eisenhower
Mt. Monroe
Mt. Lafayette
Mt. Lincoln
Mt. Haystack
Mt. Garfield
Mt. Hancock
Mt. Carrigain
Mt. Bemis
Mt. Willard
Mt. Tripyramid
Mt. Chocorua
Mt. Paugus
Mt. Passaconaway
Mt. Whiteface
Mt. Kancamagus
Mt. Osceola
Mt. Moosilauke
Mt. Cube
Mt. Cardigan
Mt. Kearsarge
Mt. Sunapee
Mt. Monadnock
Mt. Uncanoonuc
Mt. Crotched
Mt. Major
Mt. Belknap
Mt. Prospect
Mt. Kearsarge
Mt. Sunapee
Mt. Monadnock
Mt. Uncanoonuc
Mt. Crotched
Mt. Major
Mt. Belknap
Mt. Prospect
Rangeley L.
Rangeley
Rangeley Lake
Richardson L.
Umbagog L.
Androscoggin R.
Weld
Pond
Canton
Mexico
Bridgeton
Berlin
Gilead
Gorham
Randolph
Bethel
Barre
Northfield
Williamstown
Woodsville
Warren
Piermont
Orford
Orfordville
Wentworth
Lyme
Rumney
Cleveland
Groton
Plymouth
Hanover
Etna
Enfield
Canaan
Bridgewater
Bristol
Grafton
Meriden
Cornish Flat
Springfield
Windsor
Cornish Center
Croydon
Newport
Claremont
N. Charleston
Unity
Sutton
Mill Village
Charlestown
S. Acworth
Rockingham
Bellows Falls
Walpole
Drewsville
Alstead
Gilsum
Westmoreland
Sullivan
Munsonville
Parkhill
E. Sullivan
Keene
Harrisville
Marlboro
Chesterfield
Spofford
Dublin
Peterboro
Swanzey
Jaffrey
Troy
Winchester
Fitzwilliam Depot
Fitzwilliam
Richmond
Winchendon
Randolph
Bethel
Barre
Northfield
Williamstown
Woodsville
Warren
Summit
Orford
Orfordville
Wentworth
Lyme
Rumney
Cleveland
Groton
Plymouth
Hanover
Etna
Enfield
Canaan
Bridgewater
Bristol
Grafton
Meriden
Cornish Flat
Springfield
Windsor
Cornish Center
Croydon
Newport
Claremont
N. Charleston
Unity
Sutton
Mill Village
Charlestown
S. Acworth
Rockingham
Bellows Falls
Walpole
Drewsville
Alstead
Gilsum
Westmoreland
Sullivan
Munsonville
Parkhill
E. Sullivan
Keene
Harrisville
Marlboro
Chesterfield
Spofford
Dublin
Peterboro
Swanzey
Jaffrey
Troy
Winchester
Fitzwilliam Depot
Fitzwilliam
Richmond
Winchendon
Conway
Madison
Silver Lake
Freedom
Ossipee
Tamworth
Sandwich
Moultonville
Center Ossipee
Wolfeboro
Wolfeboro Falls
Alton
Alton Mills
Middleton
New Durham
Milton
Milton Mills
Sanbornville
Wakefield
Brookfield
Effingham
Ossipee
Center Ossipee
Tuftonboro
Melvin Village
N. Wolfeboro
Wolfeboro
Laconia
Winnisquam
Tilton
Belmont
Gilmanton
Gilmanton Iron Works
Canterbury
Barnstead
Center Barnstead
Pittsfield
Chichester
Epsom
Northwood
Nottingham
Deerfield
Center Deerfield
Suncook
Candia
Raymond
Fremont
Exeter
Hampton
Hampton Falls
Seabrook
Newburyport
Rye
Rye Beach
Portsmouth
Newmarket
Durham
Dover
Rochester
Farmington
Somersworth
Rollinsford
Dover Point
Barrington
Strafford
Lee
Epping


MASSACHUSETTS
Scale of Miles
0 5 10 15 20 25 30
VERMONT
NEW HAMPSHIRE
CONNECTICUT
RHODE ISLAND
NEW YORK
ATLANTIC OCEAN
Massachusetts Bay
BOSTON
Cape Cod
CAPE COD BAY
Provincetown
North Truro
Truro
Wellfleet
South Wellfleet
Eastham
Orleans
Brewster
Chatham
Harwich
Dennis
Yarmouth
Barnstable
Sandwich
Plymouth
Plymouth Bay
Gurnet Pt.
Duxbury
Marshfield
Scituate
Cohasset
Hingham
Weymouth
Quincy
Braintree
Milton
Dedham
Brookline
Newton
Cambridge
Somerville
Medford
Malden
Melrose
Revere
Chelsea
Lynn
Saugus
Wakefield
Woburn
Lexington
Concord
Waltham
Watertown
Framingham
Natick
Sherborn
Medfield
Norfolk
Wrentham
Foxboro
Stoughton
Randolph
Holbrook
Rockland
Hanover
Norwell
Marshfield Hills
Abington
Whitman
Bridgewater
Brockton
Easton
Mansfield
Norton
Taunton
Raynham
Middleboro
Lakeville
Carver
Plymouth
Kingston
Halifax
Plympton
Chiltonville
Manomet
Wellfleet
Rockport
Gloucester
Beverly
Salem
Peabody
Marblehead
Danvers
Lynnfield
Andover
Boxford
Georgetown
Groveland
Newbury
Newburyport
Salisbury
Amesbury
Merrimac
Haverhill
Methuen
Lawrence
North Andover
Tewksbury
Billerica
Chelmsford
Lowell
Dracut
Tyngsboro
Dunstable
Pepperell
Ashby
Townsend
Groton
Ayer
Shirley
Lunenburg
Fitchburg
Leominster
Westminster
Gardner
Templeton
Winchendon
Ashburnham
Hubbardston
Princeton
Sterling
Clinton
Lancaster
Bolton
Harvard
Stow
Maynard
Hudson
Marlboro
Northboro
Southboro
Westboro
Worcester
Auburn
Millbury
Grafton
Upton
Hopkinton
Holliston
Millis
Sherborn
Needham
Wellesley
Natick
Framingham
Ashland
Holden
Paxton
Rutland
Oakham
Barre
Hardwick
New Braintree
Brookfield
West Brookfield
Spencer
Leicester
Dudley
Charlton
Oxford
Sturbridge
Southbridge
Webster
Douglas
Uxbridge
Blackstone
Mendon
Milford
Hopedale
Bellingham
Franklin
Wrentham
Norfolk
Plainville
North Attleboro
Attleboro
Seekonk
Rehoboth
Swansea
Somerset
Fall River
Westport
New Bedford
Acushnet
Mattapoisett
Rochester
Marion
Wareham
East Wareham
Onset
Buzzards Bay
Falmouth
Woods Hole
Quissett
Bourne
Monument Beach
Cataumet
Mashpee
West Falmouth
Sandwich
Monomoy Pt.
Nantucket Sound
Vineyard Haven
Oak Bluffs
Edgartown
Great Pt.
Nantucket Harbor
Nantucket
NANTUCKET ISLAND
MARTHAS VINEYARD ISLAND
Martha's Vineyard Sound
Gay Head
Chilmark
NO MANS LAND
Muskeget Chan.
MUSKEGET I.
Pt. Judith
Sandy Pt.
BLOCK ISLAND
BLOCK ISLAND SOUND
(To Rhode I.)
Dickens Pt.
FISHERS I.
PLUM I.
LONG ISLAND
LONG ISLAND SOUND
ELIZABETH IS.
Bridgeport
Stamford
Greenwich
New Canaan
Norwalk
Westport
Fairfield
Danbury
Ansonia
New Haven
Meriden
Waterbury
Wallingford
Cheshire
Southington
New Britain
Bristol
Litchfield
Torrington
Winsted
Canaan
Salisbury
Kent
New Milford
Sharon
Cornwall
Goshen
Litchfield
Morris
Watertown
Thomaston
Plymouth
Harwinton
Bethlehem
Woodbury
Southbury
Middlebury
Naugatuck
Oxford
Seymour
Derby
Shelton
Monroe
Newtown
Bethel
Redding
Ridgefield
Wilton
Norwalk
Darien
Stamford
Greenwich
New Canaan
Hartford
Manchester
Rockville
Willimantic
Plainfield
Putnam
Thompson
Killingly
Pomfret
Brooklyn
Canterbury
Windham
Scotland
Hampton
Chaplin
Eastford
Ashford
Mansfield
Coventry
Andover
Bolton
Vernon
Tolland
Ellington
Somers
Stafford
Union
Willington
Ashford
Woodstock
Thompson
Killingly
Putnam
Pomfret
Brooklyn
Canterbury
Plainfield
Sterling
Voluntown
Griswold
Lisbon
Sprague
Franklin
Bozrah
Norwich
Preston
Ledyard
Montville
New London
Waterford
Groton
Stonington
Mystic
Pawcatuck
Westerly
Charlestown
Richmond
Hopkinton
Exeter
North Kingstown
Wickford
Narragansett Pier
Kingston
South Kingstown
Point Judith
Newport
Middletown
Portsmouth
Tiverton
Little Compton
Adamsville
Sakonnet Pt.
Sakonnet R.
Westport R.
Taunton R.
Blackstone R.
Pawtucket R.
Pawtuxet R.
Pawcatuck R.
Housatonic R.
Connecticut R.
Thames R.
Quinebaug R.
Shetucket R.
Quinnipiac R.
Naugatuck R.
Farmington R.
Hoosic R.
Deerfield R.
Millers R.
Chicopee R.
Westfield R.
Agawam R.
Farmington Canal
Blackstone Canal
Providence
Pawtucket
Central Falls
Cranston
Warwick
Bristol
Barrington
Warren
Seekonk
Attleboro
Norton
Easton
Raynham
Taunton
Berkley
Dighton
Somerset
Swansea

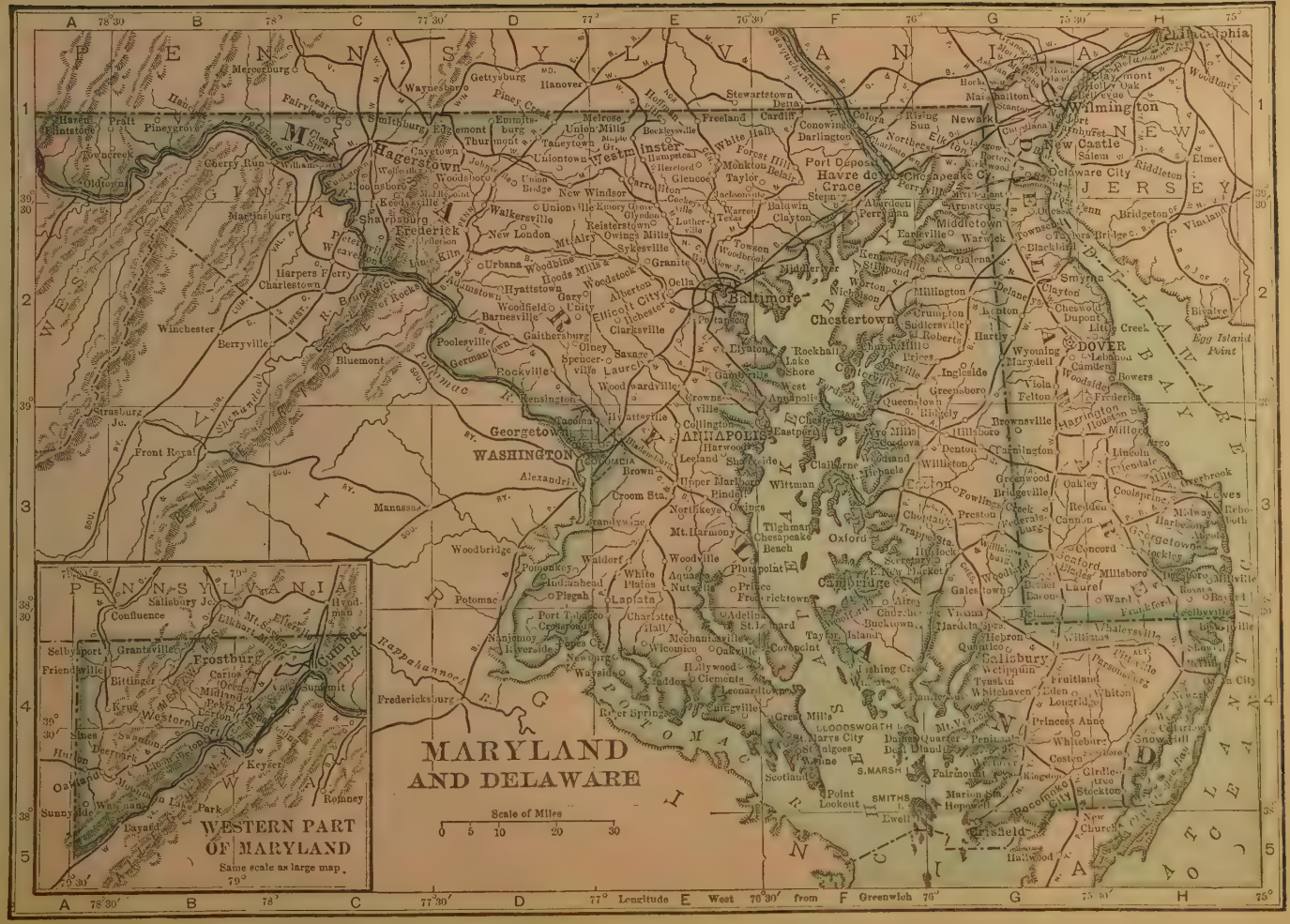
RHODE ISLAND
Scale of Miles
0 1 2 3 4 5 10
Longitude West 71° 30′ from Greenwich
Woonsocket
Pawtucket
Central Falls
PROVIDENCE
E. Providence
Cranston
Warwick
Bristol
Fall River
Newport
Westerly
Narragansett Pier
Point Judith
Block I.
Block Island Sound
Atlantic Ocean
Narragansett Bay
Mount Hope Bay
Providence River
Connecticut
Massachusetts


CONNECTICUT
The Race
LONG ISLAND SOUND
HARTFORD
New Haven
Bridgeport
Waterbury
Middletown
New Britain
Meriden
Norwich
New London
Danbury
Naugatuck
Ansonia
Stamford
Greenwich
Scale of Miles
0 5 10 15 20
Longitude West from Greenwich

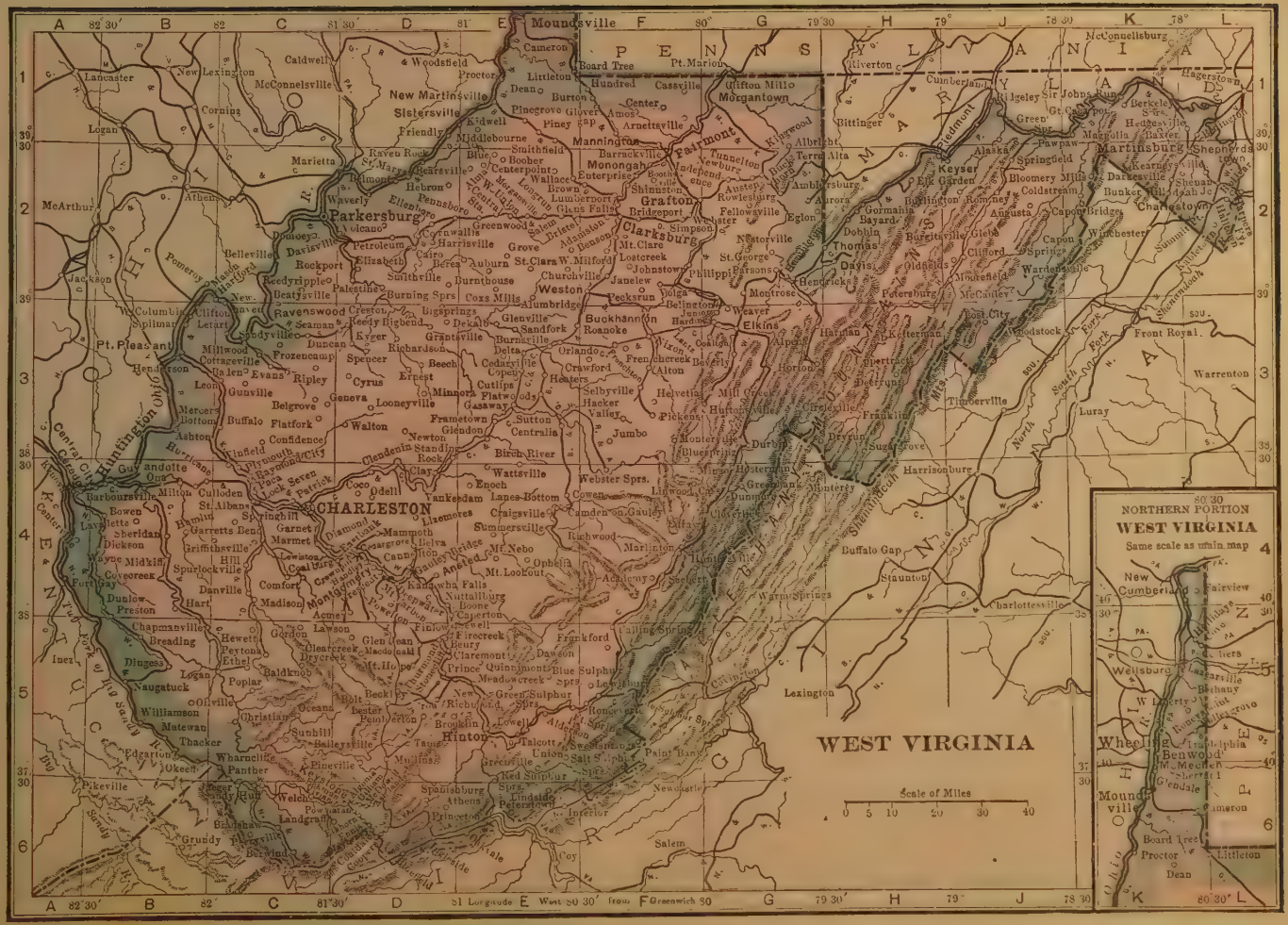

NEW YORK
Scale of Miles
0 10 20 30 40 50 60
SOUTHERN PORTION OF NEW YORK
Same Scale as Main Map
ONTARIO
LAKE ONTARIO
LAKE ERIE
ATLANTIC OCEAN
LONG ISLAND SOUND
CONNECTICUT
PENNSYLVANIA
ADIRONDACK MTS.
CATSKILL MTS.
Buffalo
Rochester
Syracuse
Oswego
Utica
Albany
Troy
Schenectady
Binghamton
Elmira
Jamestown
Niagara Falls
Longitude West from Greenwich

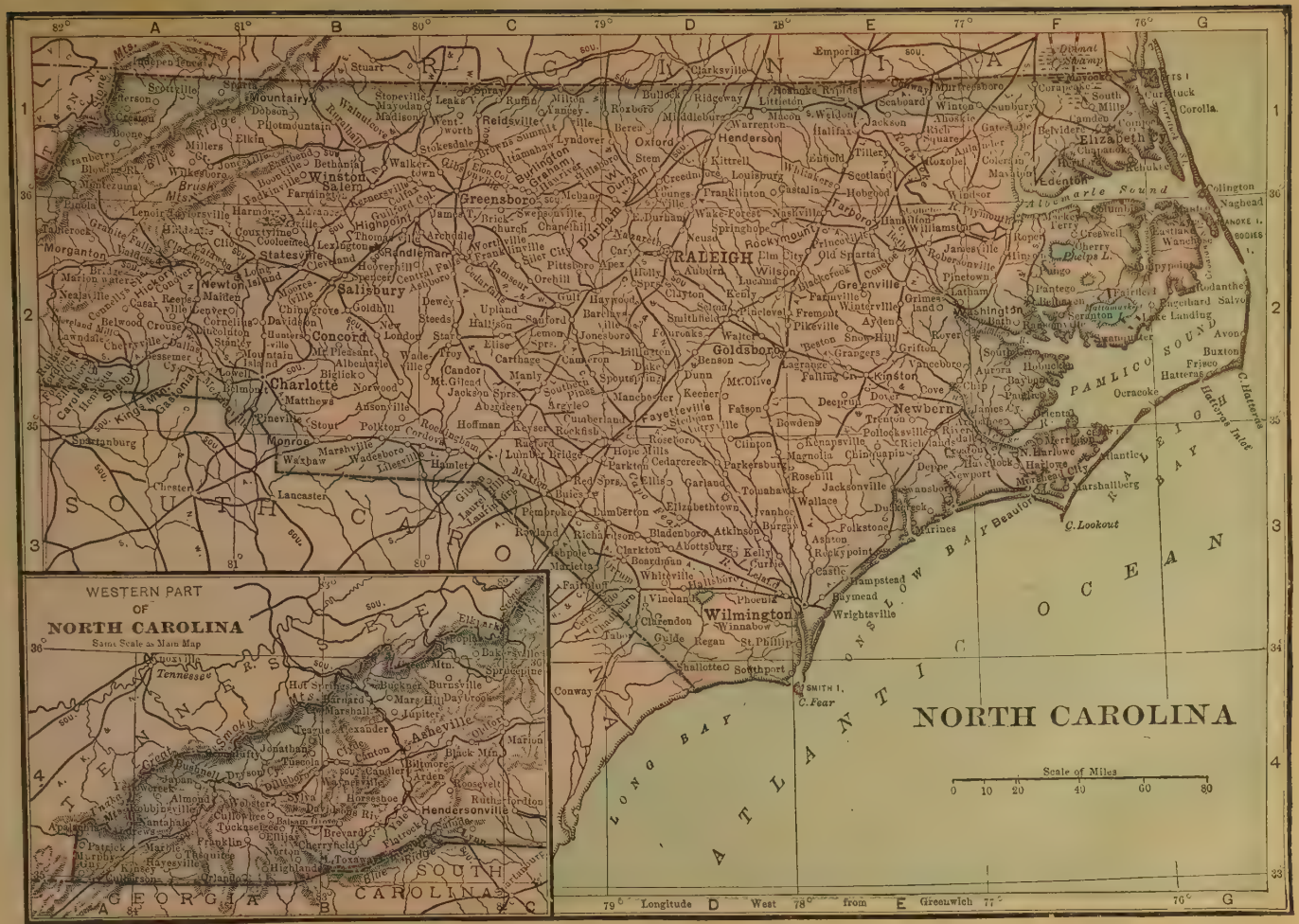
NEW JERSEY.
Scale of Miles
0 5 10 15 20 25 30
A 75° 30′ B 75 C 71° 30′ D 74 E
Longitude 74° 30′ West from Greenwich
Delaware Bay
Atlantic City
Barnegat Inlet
Hereford Inlet
New Inlet
Egg Harbor Inlet
Lower Bay
Sandy Hook
PHILADELPHIA
TRENTON
Camden
Paterson
Elizabeth
Jersey City
Bayonne
Newark
Orange
Morristown
New Brunswick
Plainfield
Perth Amboy
Long Island Sound
Atlantic Ocean
DELAWARE
PENNSYLVANIA
NEW JERSEY
DELAWARE
DOVER
Cape May Court House
Cape May
Wildwood
Holly Beach
Ocean City
Somers Point
Longport
Margate City
Ventnor City
Brigantine
Absecon
Pleasantville
Egg Harbor City
Hammonton
Millville
Bridgeton
Vineland
Salem
Woodbury
Camden
Haddonfield
Merchantville
Collingswood
Gloucester
Westville
Woodbury Heights
Glassboro
Williamstown
Winslow
Clayton
Elmer
Malaga
Newfield
Delaware City
Penns Grove
Pennsville
Swedesboro
Paulsboro
Gibbstown
Bridgeport
Mantua
Clementon
Berlin
Atco
Lindenwold
Haddonfield
Marlton
Medford
Vincentown
Lumberton
Mount Holly
Pemberton
Browns Mills
Wrightstown
New Egypt
Jobstown
Columbus
Crosswicks
Fieldsboro
Bordentown
Burlington
Florence
Roebling
Riverside
Delanco
Palmyra
Riverton
Cinnaminson
Moorestown
Mount Laurel
Lumberton
Vincentown
Medford
Woodmansie
Chatsworth
Whiting
Toms River
Barnegat
Barnegat Park
Manahawken
Jenkins
West Creek
Parkertown
Tuckerton
Beach Haven
Port Republic
Pomona
Smith's Landing
Estell Manor
Port Elizabeth
Tuckahoe
Petersburg
Leesburg
Woodbine
Sea Isle Jc.
Sea Isle City
Dennisville
Goshen
Avalon
Green Creek
Riograndc
Cold Spring
Whitesboro
Ocean View
South Atlantic City
Seaside Park
Bay Head
Point Pleasant
Mantoloking
Lakewood
Farmingdale
Allenhurst
Asbury Park
Ocean Grove
Bradley Beach
Belmar
Spring Lake
Manasquan
Deal Beach
Elberon
Long Branch
Seabright
Highlands
Atlantic Highlands
Red Bank
Shrewsbury
Eatontown
Freehold
Englishtown
Jamesburg
Marlboro
Matawan
Keyport
Hazlet
Middletown
Wickatunk
Monmouth Jc.
Spotswood
Milltown
Metuchen
Woodbridge
Carteret
Rahway
Linden
Roselle
Roselle Park
Elizabeth
Irvington
Bloomfield
Glen Ridge
Montclair
Nutley
Passaic
Clifton
Garfield
Wallington
Lodi
Rutherford
East Rutherford
Carlstadt
Kearny
Harrison
Jersey City
Hoboken
Weehawken
Union City
West New York
Guttenberg
North Bergen
Secaucus
Jersey City
Bayonne
Staten Island
New York
Lower Bay
Sandy Hook
Long Island Sound
Atlantic Ocean
Delaware Bay
Boundary Line
New Jersey
Delaware
Pennsylvania
Delaware
Dover
Cape May Court House
Cape May
Wildwood
Holly Beach
Ocean City
Somers Point
Longport
Margate City
Ventnor City
Brigantine
Absecon
Pleasantville
Egg Harbor City
Hammonton
Millville
Bridgeton
Vineland
Salem
Woodbury
Camden
Haddonfield
Merchantville
Collingswood
Gloucester
Westville
Woodbury Heights
Glassboro
Williamstown
Winslow
Clayton
Elmer
Malaga
Newfield
Delaware City
Penns Grove
Pennsville
Swedesboro
Paulsboro
Gibbstown
Bridgeport
Mantua
Clementon
Berlin
Atco
Lindenwold
Haddonfield
Marlton
Medford
Vincentown
Lumberton
Mount Holly
Pemberton
Browns Mills
Wrightstown
New Egypt
Jobstown
Columbus
Crosswicks
Fieldsboro
Bordentown
Burlington
Florence
Roebling
Riverside
Delanco
Palmyra
Riverton
Cinnaminson
Moorestown
Mount Laurel
Lumberton
Vincentown
Medford
Woodmansie
Chatsworth
Whiting
Toms River
Barnegat
Barnegat Park
Manahawken
Jenkins
West Creek
Parkertown
Tuckerton
Beach Haven
Port Republic
Pomona
Smith's Landing
Estell Manor
Port Elizabeth
Tuckahoe
Petersburg
Leesburg
Woodbine
Sea Isle Jc.
Sea Isle City
Dennisville
Goshen
Avalon
Green Creek
Riograndc
Cold Spring
Whitesboro
Ocean View
South Atlantic City
Seaside Park
Bay Head
Point Pleasant
Mantoloking
Lakewood
Farmingdale
Allenhurst
Asbury Park
Ocean Grove
Bradley Beach
Belmar
Spring Lake
Manasquan
Deal Beach
Elberon
Long Branch
Seabright
Highlands
Atlantic Highlands
Red Bank
Shrewsbury
Eatontown
Freehold
Englishtown
Jamesburg
Marlboro
Matawan
Keyport
Hazlet
Middletown
Wickatunk
Monmouth Jc.
Spotswood
Milltown
Metuchen
Woodbridge
Carteret
Rahway
Linden
Roselle
Roselle Park
Elizabeth
Irvington
Bloomfield
Glen Ridge
Montclair
Nutley
Passaic
Clifton
Garfield
Wallington
Lodi
Rutherford
East Rutherford
Carlstadt
Kearny
Harrison
Jersey City
Hoboken
Weehawken
Union City
West New York
Guttenberg
North Bergen
Secaucus

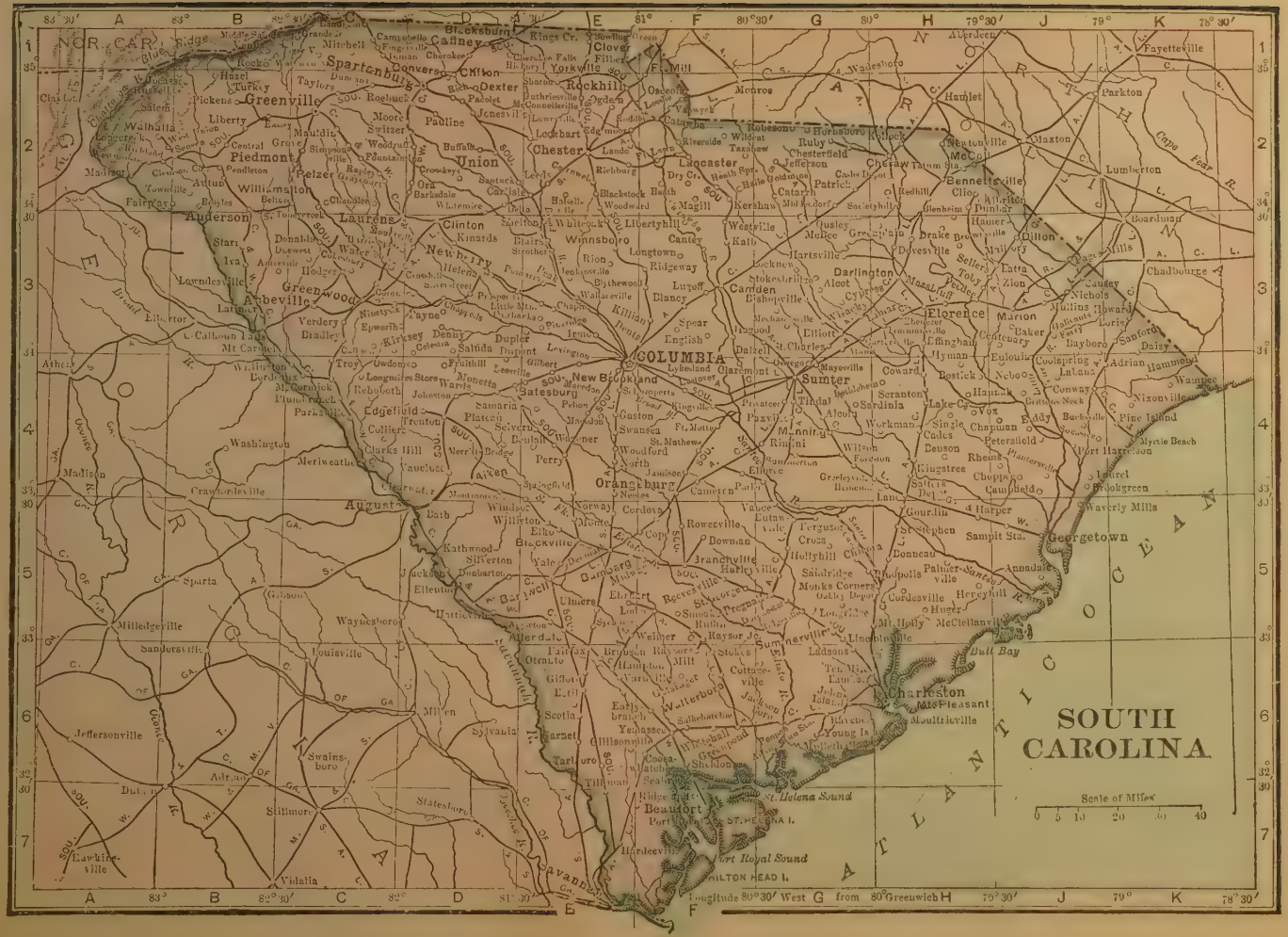
PENNSYLVANIA
Scale of Miles
0 5 10 20 30 40 50
LAKE ERIE
NEW YORK
Longitude 80° West from Greenwich
Longitude 79° West from Greenwich
Longitude 78° West from Greenwich
Longitude 77° West from Greenwich
Longitude 76° West from Greenwich
Longitude 75° West from Greenwich
Dunkirk
Dayton
Northeast
Erie
Chautauqua L.
Wesleyville
Waterford
Corry
Sugargrove
Columbus
Youngsville
Warren
Lewis Run
Bradford
Eldred
Shinglehouse
Genesee
Elkland
Knoxville
Tioga
Lawrence V.
Athens
Sayre
Warren Cen.
Hallstead
Susquehanna
Binghamton
Ithaca
Norwich
Albion
Springboro
Union City
Cumbridge Spr.
Spartansburg
Centerville
Titusville
Pleasant V.
Petroleum Center
Tionesta
Marien V.
Utica
Oil City
Franklin
Leeper
Clarington
Stoneboro
Sharpsville
Sharon
Mercer
Middlesex
Grove City
Parkers Landing
Slippery Rock
Newcastle
Euclid
Chicora
Mosgrove
Dayton
Ellwood City
Zelienople
Kittanning
Conquenessing
Smicksburg
Ford City
Chambers V.
Freeport
Leechburg
Vandergrift
Apollo
Avonmore
Homer City
Indiana
Spangler
Patton
Carrolltown
Ebensburg
Allegheny
Pittsburg
Wilkinsburg
Whmerding
Irwin
Greensburg
Braddock
Latrobe
Ligonier
Johnstown
Hollsopple
Senior
Windber
Oro Hill
Saxton
Osterburg
Robertsdale
Riddlesburg
Hopewell
Bedford
Harrisonville
McConnellsburg
Chambersburg
Tablerock
Springfield
Fayetteville
New Oxford
Dallastown
Redlion
Glenrock
Hanover
Littlestown
Gettysburg
Greenmount
Waynesboro
Hagerstown
Cumberland
Wellersburg
Warfordsburg
Welsh Run
Mercersburg
Chanceysville
Fossilville
Webster Mills
Hyndman
Garrett
Meyersdale
Listonburg
Rockwood
Berlin
Somerset
Connellsville
Scottdale
Mt. Pleasant
Mammoth
Newton
Washington
Monongahela City
Canonsburg
McDonald
Clayesville
California
W. Union
Windridge
Sycamore
Waynesburg
Greensboro
Jollytown
Alleppo
Fairplains
Brownsville
Centerville
Rices Landing
Carmichaels
Jefferson
Monongahela
Elizabeth
Belle Vernon
Perryopolis
Connellsville
Dunbar
Uniontown
Smithfield
Brownsville
Point Marion
Fairmont
Morgantown
Kingwood
Rockville
Cumberland
Piedmont
Keyser
Romney
Petersburg
Moorefield
Franklin
Harrisonburg
Staunton
Winchester
Martinsburg
Shepherdstown
Harpers Ferry
Charlestown
Kearneysville
Shepherdstown
Leetown
Middleway
Bunker Hill
Inwood
Martinsburg
Hedgesville
Falling Waters
Williamsport
Lock Haven
Bellefonte
Milesburg
Snowshoe
Beechcreek
Millhall
Watsontown
Northumberland
Sunbury
Shamokin
Mt. Carmel
Centralia
Ashland
Tamaqua
Pottsville
Schuylkill Haven
Tremont
Lebanon
Cornwall
Middletown
Elizabethtown
Mt. Joy
Manheim
Lititz
Ephrata
Spring Cy.
Phoenix
Akron
Parkesburg
Coatesville
Downingtown
Bridgeport
Norristown
Phoenixville
Pottstown
Boyertown
Reading
Fleetwood
Kutztown
Allentown
Bethlehem
S. Bethlehem
Easton
Phillipsburg
Belvidere
Hackettstown
Washington
Oxford
Chester
Media
Westchester
Philadelphia
Delaware R.
Delaware Bay
Delaware
Maryland
Virginia
West Virginia
Lake Erie
Lake Chautauqua
Allegheny R.
Ohio R.
Monongahela R.
Youghiogheny R.
Susquehanna R.
Juniata R.
Conemaugh R.
Kiskiminetas R.
Blue Mountains
Kittatinny Mts.
Tuscarora Mts.
Allegheny Mts.
Laurel Hill
Chestnut Ridge
Negro Mts.
Bald Eagle Mts.
Nittany Mts.
Seven Mts.
Tuscarora Valley
Cumberland Valley
Lehigh Valley
Wyoming Valley
Lackawanna Valley
Scranton
Wilkes-Barre
Pittston
Plymouth
Nanticoke
Hazleton
Shenandoah
Mahanoy City
Shamokin
Sunbury
Northumberland
Lewisburg
Milton
Danville
Bloomsburg
Berwick
Catawissa
Tunkhannock
Montrose
Susquehanna
Binghamton
Owego
Elmira
Corning
Waverly
Towanda
Athens
Sayre
Gillett
Ulster
Troy
Canton
Wyalusing
Dushore
Laporte
Sonestown
Montoursville
Muncy
Watsontown
Milton
Lewisburg
Selinsgrove
Middleburg
Mifflinburg
Lewistown
Mifflintown
Port Royal
Newport
Duncannon
Millerstown
Halifax
Hummelstown
Palmyra
Annville
Myerstown
Womelsdorf
Robesonia
Wernersville
Sinking Spring
Shillington
Birdsboro
Douglassville
Pottstown
Phoenixville
Norristown
Conshohocken
Manayunk
Germantown
Chestnut Hill
Roxborough
Frankford
Kensington
Southwark
Moyamensing
Passyunk
Gray's Ferry
Darby
Upper Darby
Lansdowne
Yeadon
Haverford
Bryn Mawr
Ardmore
Wayne
Radnor
Villanova
Conshohocken
Norristown
Jenkintown
Abington
Willow Grove
Hatboro
Doylestown
Newtown
Langhorne
Bristol
Tullytown
Morrisville
Trenton
Princeton
Lawrenceville
Hopewell
Pennington
Titusville
Meadville
Conneautville
Linesville
Conneaut L.
Cambridge Spr.
Centerville
Tidioute
Cherrygrove
Kane
Hutchins
Clermont
Sheffield
Mt. Jewett
Ludlow
Mt. Alton
Smethport
Colegrove
Coudersport
Galeton
Gaines
Ansonia
Wellsboro
Mansfield
Troy
Towanda
Monroeton
Tarantula
Ulster
Gillett
Athens
Sayre
Warren Cen.
Hallstead
Susquehanna
Binghamton
Owego
Elmira
Corning
Waverly
Towanda
Wyalusing
Dushore
Laporte
Sonestown
Montoursville
Muncy
Watsontown
Milton
Lewisburg
Selinsgrove
Middleburg
Mifflinburg
Lewistown
Mifflintown
Port Royal
Newport
Duncannon
Millerstown
Halifax
Hummelstown
Palmyra
Annville
Myerstown
Womelsdorf
Robesonia
Wernersville
Sinking Spring
Shillington
Birdsboro
Douglassville
Pottstown
Phoenixville
Norristown
Conshohocken
Manayunk
Germantown
Chestnut Hill
Roxborough
Frankford
Kensington
Southwark
Moyamensing
Passyunk
Gray's Ferry
Darby
Upper Darby
Lansdowne
Yeadon
Haverford
Bryn Mawr
Ardmore
Wayne
Radnor
Villanova
Conshohocken
Norristown
Jenkintown
Abington
Willow Grove
Hatboro
Doylestown
Newtown
Langhorne
Bristol
Tullytown
Morrisville
Trenton
Princeton
Lawrenceville
Hopewell
Pennington


MARYLAND
AND DELAWARE
Scale of Miles
0 5 10 20 30
WESTERN PART
OF MARYLAND
Same scale as large map.
Longitude West from Greenwich
Baltimore
WASHINGTON
ANNAPOLIS
Chesapeake Bay
Delaware Bay
Wilmington
Philadelphia
Hagerstown
Frederick
Cumberland
Georgetown
Chestertown
DOVER
Salisbury
Princess Anne
Cambridge
Easton
Centreville
Elkton
New Castle
Delaware City
Middletown
Smyrna
Milford
Seaford
Laurel
Denton
Federalsburg
Crisfield
Pocomoke City
Snow Hill
Berlin
Ocean City
Rehoboth
Lewes
Bridgeville
Greenwood
Harrington
Milton
Dover
Woodside
Camden
Wyoming
Magnolia
Felton
Frederica
Viola
Ingleside
Greensboro
Queenstown
Ridgely
Hillsboro
Brownsville
Tarrington
Lincoln
Ellendale
Argo
Millsboro
Georgetown
Concord
Seaford
Laurel
Delmar
Selbyville
Frankford
Dagsboro
Millville
Bethany Beach
Fenwick Island
Rosedale
Ward
Whaleysville
Williams
Whitesville
Pittsville
Parsonsburg
Newark
Elkton
Port Deposit
Havre de Grace
Aberdeen
Perryman
Edgewood
Chesapeake City
Elsmere
Riddleton
Bridgeton
Vineland
Millington
Clayton
Chesterville
Dupont
Lebanon
Bowers
Little Creek
Egg Island Point
Bivalve
Harrington
Houston
Milford
Argo
Lincoln
Ellendale
Milton
Lewes
Rehoboth
Georgetown
Millsboro
Millville
Selbyville
Frankford
Dagsboro
Bethany Beach
Fenwick Island
Rosedale
Ward
Whaleysville
Williams
Whitesville
Pittsville
Parsonsburg
Salisbury
Princess Anne
Crisfield
Pocomoke City
Snow Hill
Berlin
Ocean City
Rehoboth
Lewes
Bridgeville
Greenwood
Harrington
Milton
Dover
Woodside
Camden
Wyoming
Magnolia
Felton
Frederica
Viola
Ingleside
Greensboro
Queenstown
Ridgely
Hillsboro
Brownsville
Tarrington
Lincoln
Ellendale
Argo
Millsboro
Georgetown
Concord
Seaford
Laurel
Delmar
Selbyville
Frankford
Dagsboro
Millville
Bethany Beach
Fenwick Island
Rosedale
Ward
Whaleysville
Williams
Whitesville
Pittsville
Parsonsburg
Salisbury
Princess Anne
Crisfield
Pocomoke City
Snow Hill
Berlin
Ocean City

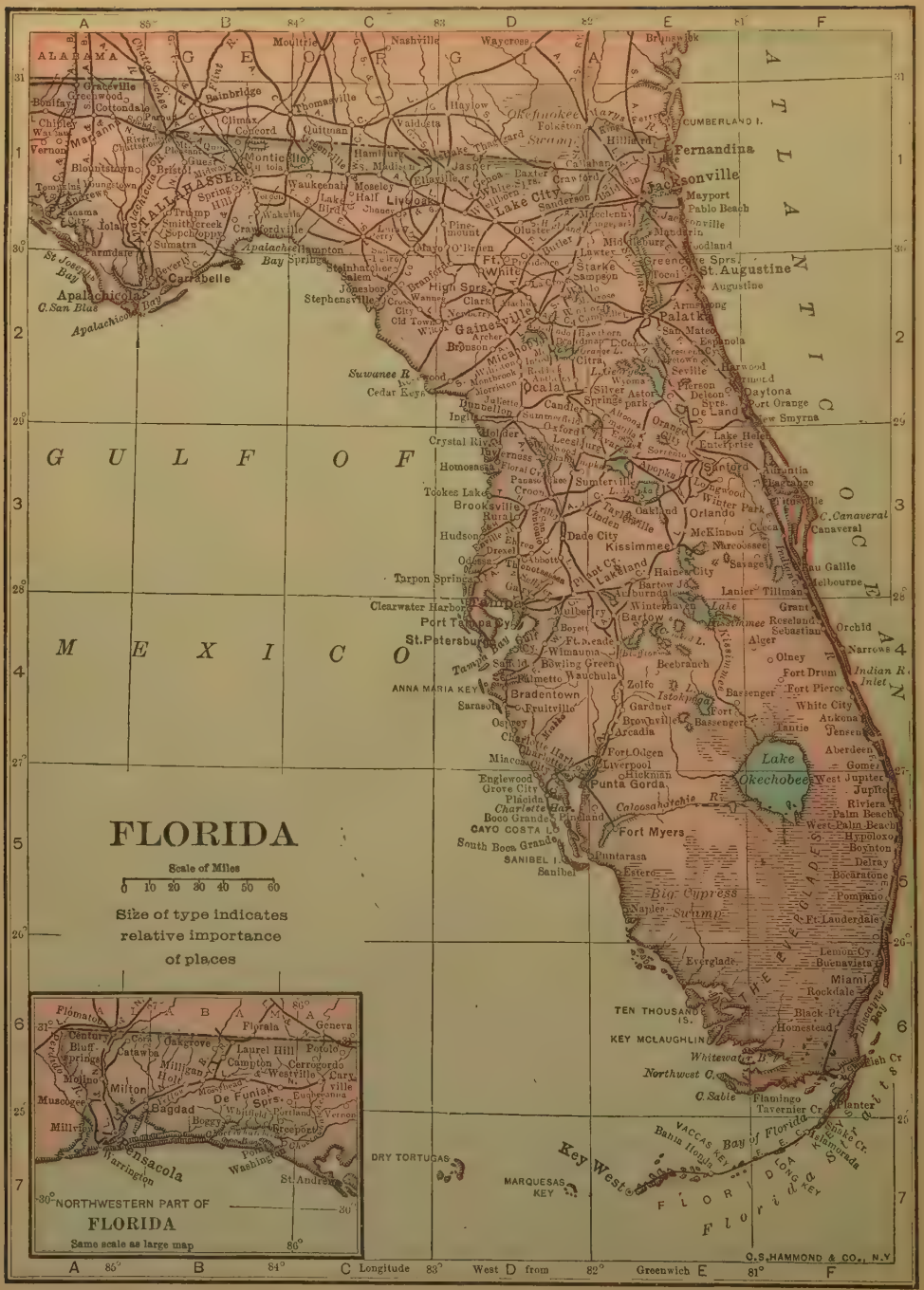
WESTERN PORTION OF
VIRGINIA
Same Scale as Main Map
VIRGINIA
Scale of Miles
0 10 20 40 60
Longitude 79° West from Greenwich
KENTUCKY
TENNESSEE
WEST VIRGINIA
PENNSYLVANIA
MARYLAND
NORTH CAROLINA
ATLANTIC OCEAN
Chesapeake Bay
Potomac R.
James R.
Roanoke R.
Shenandoah R.
Rappahannock R.
York R.
Winchester
Staunton
Charlottesville
Lynchburg
Roanoke
Fredericksburg
Culpeper
Warrenton
Alexandria
Falls Church
Leesburg
Harrisonburg
Woodstock
Front Royal
Manassas
Bedford City
Danville
Martinsville
Radford
Pulaski
Abingdon
Bristol
Tazewell
Saltville
Marion
Grundy
Richmond
Petersburg
Manchester
Williamsburg
Newport News
Portsmouth
Norfolk
Berkley
Suffolk
Franklin
Emporia
South Boston
Virginia Beach
Princess Anne
Eastville
Onancock
Chincoteague Island
Tangier
Accomac
Cape Charles
Hampton
Phoebus
Fortress Monroe
Smithfield
Surry
Jamestown
Yorktown
Gloucester
Urbanna
Tappahannock
Fredericks Hall
Louisa
Orange
Gordonsville
Culpeper
Madison
Standardsville
Stanardsville
Scottsville
Lexington
Buena Vista
Glasgow
Goshen
Clifton Forge
Covington
Hinton
Alleghany
Pocahontas
Graham
Princeton
Bluefield
Tazewell
Saltville
Marion
Abingdon
Bristol
Gate City
Jonesville
Pennington Gap
Big Stone Gap
Appalachia
Norton
Wise
Coeburn
Castlewood
Clintwood
Grundy
Cedar Bluff
Swords Creek
Raven
Honaker
Lebanon
Glade Spr.
Atkins
Emory
Elizabethton
Johnson City
Kingsport
Mountain City
Boone
Blowing Rock
Wytheville
Rural Retreat
Max Meadows
Fries
Galax
Hillsville
Independence
Oldtown
Stuart
Meadows of Dan
Spencer
Ridgeway
Cascade
Whitmell
Drewryville
Franklin
Boykins
Whaleyville
Deep Creek
Cornland
Berkley
Norfolk
Portsmouth
Newport News
Hampton
Phoebus
Fortress Monroe
Smithfield
Surry
Jamestown
Yorktown
Gloucester
Urbanna
Tappahannock
Fredericks Hall
Louisa
Orange
Gordonsville
Culpeper
Madison
Stand


WEST VIRGINIA
Scale of Miles
0 5 10 20 30 40
NORTHERN PORTION
WEST VIRGINIA
Same scale as main map
Moundsville
Parkersburg
Clarksburg
Fairmont
Morgantown
Grafton
Weston
Elkins
Martinsburg
Charlestown
Harpers Ferry
Shepherdstown
Wheeling
Benwood
Mound-ville
CHARLESTON
Huntington
Point Pleasant
New Martinsville
Sistersville
Ravenswood
Ripley
Spencer
Gauley Bridge
Hinton
Lewisburg
Ronceverte
Lexington
Staunton
Buffalo Gap
Harrisonburg
Warrenton
Front Royal
Winchester
Cumberland
Hagerstown
Greenbrier
Kanawha
Monongahela
Shenandoah
Potomac
Ohio
Virginia
Pennsylvania
Maryland
Kentucky


NORTH CAROLINA
RALEIGH
Wilmington
Charlotte
Greensboro
Winston
Salem
Fayetteville
Goldsboro
Newbern
Asheville
Elizabeth City
Edenton
Scale of Miles
0 10 20 40 60 80
Longitude West from Greenwich
ATLANTIC OCEAN
SOUTH CAROLINA
TENNESSEE
GEORGIA
VIRGINIA
Albemarle Sound
Pamlico Sound
Dismal Swamp
C. Lookout
C. Fear
C. Hatteras
WESTERN PART OF NORTH CAROLINA
Same Scale as Main Map


SOUTH CAROLINA
Scale of Miles
0 5 10 20 30 40
Longitude 80° 30′ West from Greenwich
ATLANTIC OCEAN
Columbia
Charleston
Georgetown
Augusta
Greenville
Spartanburg
Rock Hill
Florence
Sumter
Orangeburg
Aiken
Anderson
Greenwood
Newberry
Laurens
Union
Chester
Lancaster
Darlington
Marion
Dillon
Bennettsville
Conway
Myrtle Beach
Beaufort
Port Royal Sound
St. Helena Sound
Bull Bay
Pee Dee R.
Santee R.
Savannah R.
Broad R.
Saluda R.
Edisto R.
Cape Fear R.
NORTH CAROLINA
GEORGIA

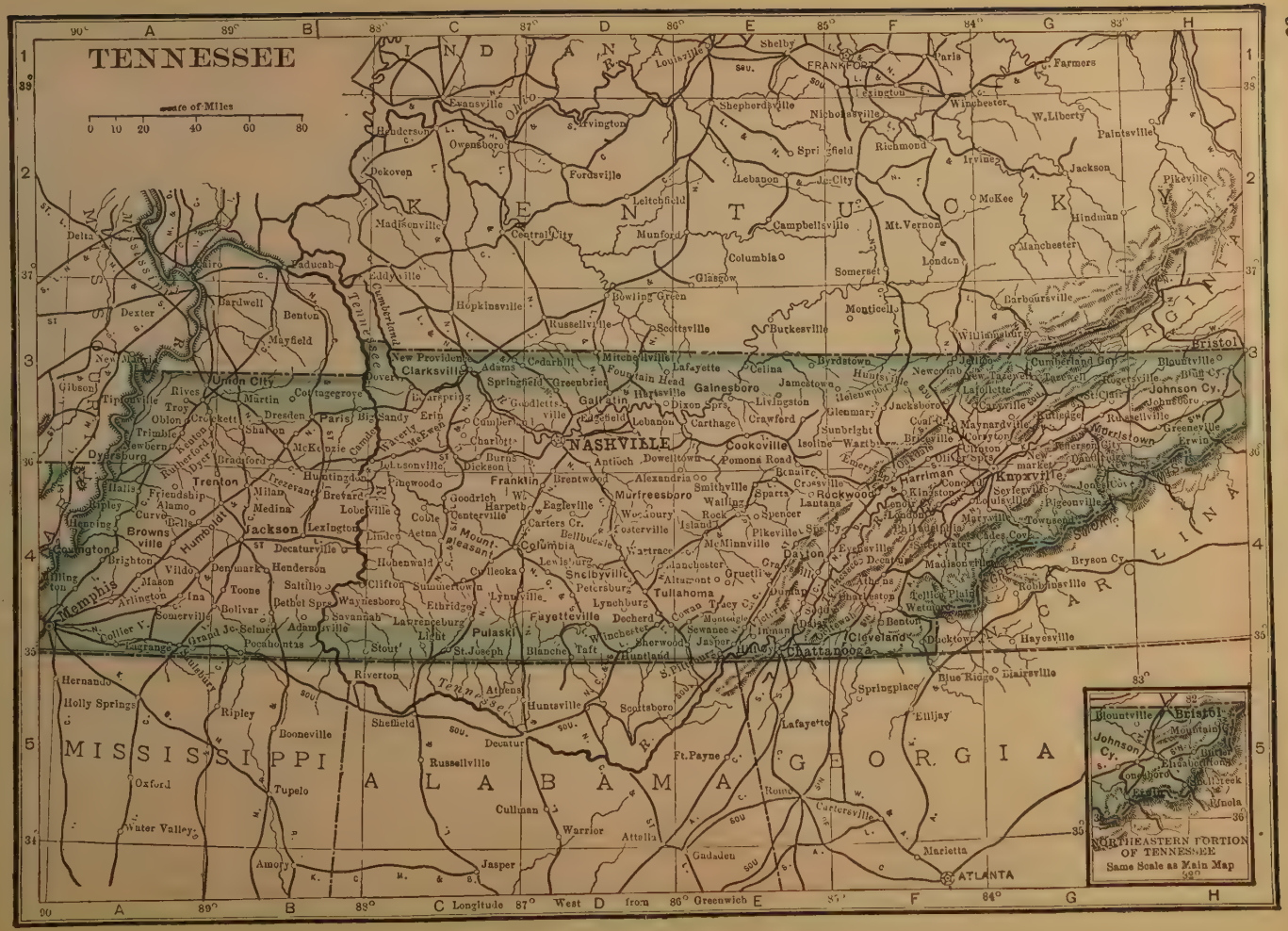
GEORGIA
Scale of Miles
0 10 20 30 40 50 60
TENNESSEE
NORTH CAROLINA
SOUTH CAROLINA
ALABAMA
FLORIDA
ATLANTIC OCEAN
Atlanta
Athens
Augusta
Columbus
Macon
Savannah
Brunswick
Thomasville
Waycross
Americus
Cartersville
Dalton
Rome
Gainesville
Toccoa
Greenville
Anderson
Clinton
Ridgeway
Abbeville
Columbia
Batesburg
Edgefield
Washington
Lincolnton
Thomson
Grovetown
Harlem
Hephzibah
Norwood
Warrenton
Sparta
Milledgeville
Gordon
Dublin
Swainsboro
Statesboro
Millen
Sylvania
Louisville
Perkins
Waynesboro
Girard
Augusta
Aiken
Barnwell
Denmark
Fairfax
Allendale
Idlewood
Vidette
Carswell
Gibson
Wrens
Mitchell
Devereaux
Culverton
Jewell
Avera
Greens Cut
Tennille
Harrison
Barton
Walley
Midville
Ennis
Beechhill
Irwinton
Wrightsville
Adrian
Summit
Graymont
Monte
Jimps
Register
Metter
Hurrmill
Stillmore
Rocky Ford
Dover
Oliver
Eagle
Brooklet
Guyton
Rockledge
Soperton
Lumber City
Hazlehurst
Baxley
Graham
Broxton
Wheaton
Surrency
Doctortown
Darien
Jesup
Odessa
Ridge Ville
Eldorado
Glenville
Lambert
Ludowici
Hinesville
Coe
Reglesville
Eliza
Dasher
Bellville
Collins
Oboog
Helena
Alley
Lyons
Mt. Vernon
Eastman
Hawkinsville
Empire
Cochran
Long Street
Dexter
Allentown
Perry
Myrtle
Marshallville
Knoxville
Byron
Fort Valley
Talbotton
Waverly Hall
Musella
Roberta
Butler
Geneva
Powersville
Gallemore
Irwinton
Jeffersonville
Wrightsville
Dry Branch
Gordon
Milledgeville
Sandersville
Haddock
Stephens
Tennille
Barton
Harrison
Walley
Midville
Ennis
Beechhill
Adrian
Summit
Graymont
Monte
Jimps
Register
Metter
Hurrmill
Stillmore
Swainsboro
Statesboro
Millen
Sylvania
Louisville
Perkins
Waynesboro
Girard
Augusta
Aiken
Barnwell
Denmark
Fairfax
Allendale
Idlewood
Vidette
Carswell
Gibson
Wrens
Mitchell
Devereaux
Culverton
Jewell
Avera
Greens Cut
Sparta
Norwood
Warrenton
Harlem
Hephzibah
Thomson
Grovetown
Appling
Lincolnton
Washington
Edgefield
Batesburg
McCormick
Clinton
Laurens
Anderson
Greenville
Pickens
Ridgeway
Abbeville
Columbia
Toccoa
Cornelia
Avalon
Hartwell
Royston
Canon
Homer
Carnesville
Gainesville
Dawsonville
Cumming
Creighton
Talona
Ellijay
Cleveland
Blairsville
Young Harris
Hiawassee
Clayton
Rabun Gap
Highlands
Toxaway
Hayesville
Murphy
Andrews
Robbinsville
Fontana
Bryson City
Sylva
Cullowhee
Franklin
Highlands
Cashiers
Rosman
Brevard
Hendersonville
Saluda
Tryon
Landrum
Spartanburg
Union
Gaffney
Blacksburg
Kings Mountain
Shelby
Rutherfordton
Forest City
Spindale
Marion
Old Fort
Black Mountain
Asheville
Weaverville
Barnardsville
Burnsville
Spruce Pine
Newland
Linville
Banner Elk
Boone
Blowing Rock
Lenoir
Hickory
Newton
Conover
Catawba
Maiden
Lincolnton
Cherryville
Kings Mountain
Gastonia
Belmont
Mount Holly
Charlotte
Monroe
Wadesboro
Rockingham
Hamlet
Laurinburg
Maxton
Lumberton
Fairmont
Red Springs
Parkton
Fayetteville
Spring Lake
Dunn
Erwin
Coats
Benson
Smithfield
Selma
Clayton
Garner
Raleigh
Wake Forest
Louisburg
Franklinton
Henderson
Oxford
Roxboro
Yanceyville
Reidsville
Eden
Madison
Mayodan
Stoneville
Leaksville
Draper
Mount Airy
Pilot Mountain
Dobson
Elkin
Jonesville
Yadkinville
Mocksville
Salisbury
Kannapolis
Concord
Mooresville
Statesville
Troutman
Taylorsville
Hickory
Lenoir
Granite Falls
Hudson
Lenoir
Morganton
Valdese


FLORIDA
Scale of Miles
0 10 20 30 40 50 60
Size of type indicates relative importance of places
NORTHWESTERN PART OF FLORIDA
Same scale as large map
GULF OF MEXICO
ATLANTIC OCEAN
GEORGIA
ALABAMA
Tallahassee
Jacksonville
Fernandina
St. Augustine
Gainesville
Ocala
Tampa
St. Petersburg
Orlando
Daytona
Miami
Key West
Pensacola
Fort Myers
Punta Gorda
Lake Okeechobee
Everglades
Big Cypress Swamp
Suwanee R.
Apalachicola
C. San Blas
Apalachee Bay
Tarpon Springs
Clearwater Harbor
ANNA MARIA KEY
SANIBEL I.
CAYO COSTA I.
TEN THOUSAND IS.
KEY MCLAUGHLIN
DRY TORTUGAS
MARQUESAS KEY
VACCAS KEY
LONG KEY
C. Canaveral
Indian R.
Indian Inlet
Whitewater B.
Northwest C.
C. Sable
Florida Bay
Biscayne Bay
Longitude West from Greenwich
O.S. HAMMOND & CO., N.Y.

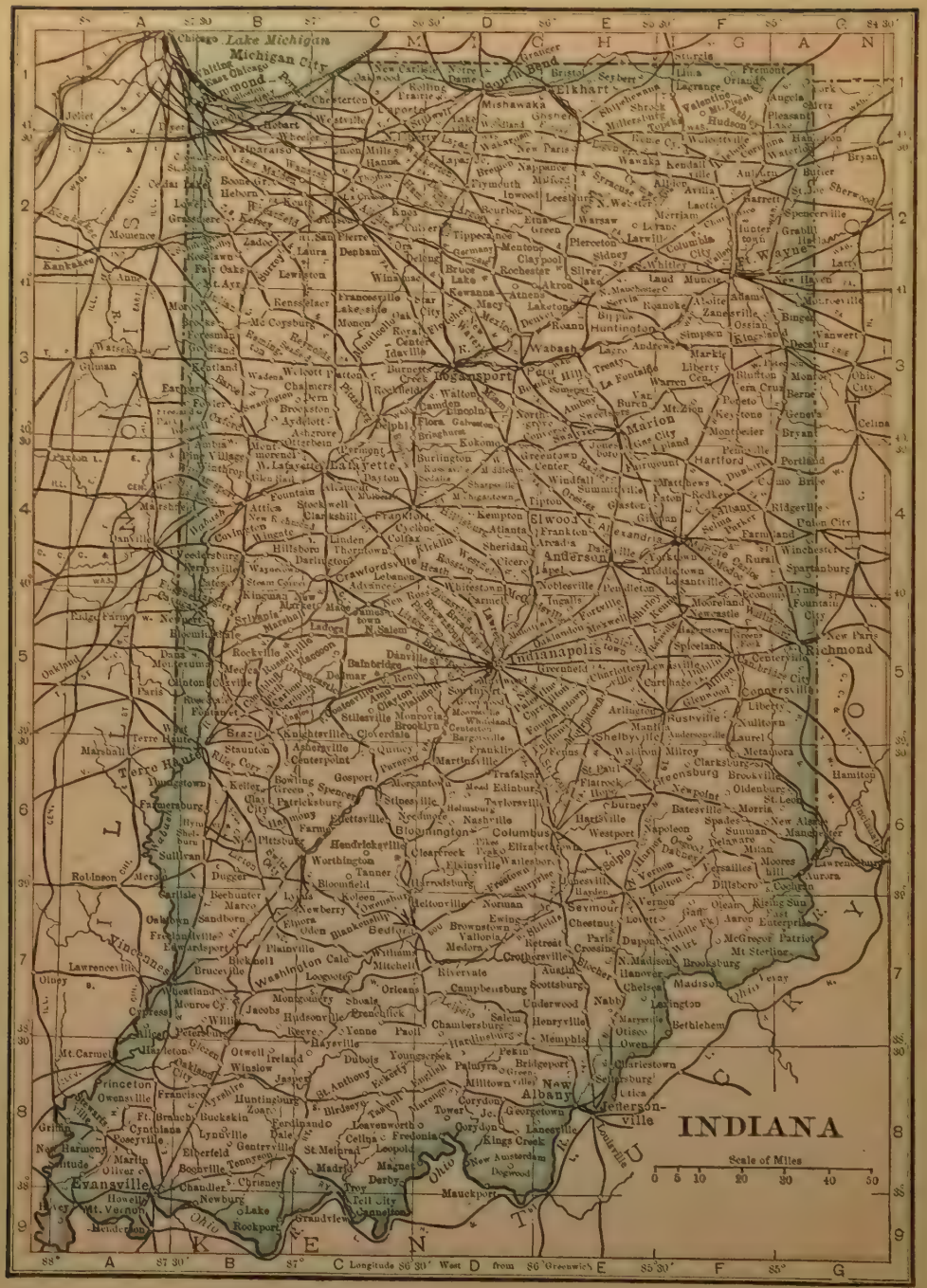
ALABAMA
Scale of Miles
0 10 20 30 40 50
C.S.HAMMOND & CO., N.Y.
GULF OF MEXICO
SANTA ROSA ISLAND
Choctawhatchee Bay
Pensacola
Mobile
Mobile Bay
Tombigbee R.
Alabama R.
Tallapoosa R.
Coosa R.
Chattahoochee R.
Apalachicola R.
Mississippi
Tennessee
Georgia
Florida
Longitude 87° West from 85° Greenwich
Huntsville
Decatur
Florence
Sheffield
Tuscumbia
Russellville
New Decatur
Scottsboro
Bridgeport
Gadsden
Anniston
Talladega
Birmingham
Jasper
Pratt City
Wylam
Bessemer
Wilsonville
Columbiana
Calera
Shelby
Alexander Cy.
Dadeville
Lafayette
Opelika
Auburn
Lanett
Phenix City
Columbus
Tuskegee
Montgomery
Selma
Prattville
Tallassee
Wetumpka
Greenville
Troy
Union Sprs.
Eufaula
Clayton
Dothan
Ozark
Enterprise
Headland
Abbeville
Graceville
Chipley
Bonifay
Crestview
DeFuniak Spr.
Milton
Pensacola
Florala
Andalusia
Opp
Brewton
Evergreen
Greenville
Tuscaloosa
Greensboro
Demopolis
Meridian
Livingston
Eutaw
Aberdeen
Amory
Fulton
Tupelo
Corinth
Iuka
Florence
Sheffield
Tuscumbia
Decatur
Huntsville
Scottsboro
Bridgeport
Gadsden
Anniston
Talladega
Birmingham
Jasper
Pratt City
Wylam
Bessemer
Wilsonville
Columbiana
Calera
Shelby
Alexander Cy.
Dadeville
Lafayette
Opelika
Auburn
Lanett
Phenix City
Columbus
Tuskegee
Montgomery
Selma
Prattville
Tallassee
Wetumpka
Greenville
Troy
Union Sprs.
Eufaula
Clayton
Dothan
Ozark
Enterprise
Headland
Abbeville
Graceville
Chipley
Bonifay
Crestview
DeFuniak Spr.
Milton
Pensacola
Florala
Andalusia
Opp
Brewton
Evergreen
Greenville
Tuscaloosa
Greensboro
Demopolis
Meridian
Livingston
Eutaw
Aberdeen
Amory
Fulton
Tupelo
Corinth
Iuka

MISSISSIPPI
TENNESSEE
ALABAMA
LOUISIANA
ARKANSAS
GULF OF MEXICO
Memphis
Vicksburg
Jackson
Meridian
Hattiesburg
Laurel
Natchez
Greenville
Greenwood
Columbus
Corinth
Tupelo
Aberdeen
West Point
Starkville
Macon
Yazoo City
Canton
Lexington
Durant
Kosciusko
Winona
Grenada
Water Valley
Oxford
Holly Springs
Clarksdale
Cleveland
Indianola
Leland
Rosedale
Tunica
Senatobia
Sardis
Batesville
Courtland
Pontotoc
New Albany
Ripley
Booneville
Iuka
Burnsville
Ackerman
Louisville
Philadelphia
Newton
Meridian
Quitman
Laurel
Ellisville
Hattiesburg
Columbia
McComb
Brookhaven
Wesson
Natchez
Woodville
Port Gibson
Crystal Springs
Hazlehurst
Gallman
Raymond
Clinton
Brandon
Pearl River
Bay St. Louis
Pass Christian
Biloxi
Gulfport
Pascagoula
Ocean Springs
Mobile
Mobile Bay
Lake Pontchartrain
Lake Maurepas
Scale of Miles
0 5 10 20 30 40 50
Longitude West from Greenwich
A B C D
91° 90° 89° 88°

KENTUCKY
Scale of Miles
0 10 20 30 40 50 60
Louisville
FRANKFORT
Lexington
Owensboro
Henderson
Paducah
Hopkinsville
Bowling Green
Madisonville
Earlington
Princeton
Cadiz
Mayfield
Hickman
Fulton
Clarksville
Springfield
Gallatin
Gainesboro
Cookeville
NASHVILLE
Lebanon
Columbia
Glasgow
Burkesville
Albany
Somerset
Russell
Greenup
Ashland
Maysville
Paris
Winchester
Richmond
Nicholasville
Harrodsburg
Danville
Stanford
Lancaster
Versailles
Georgetown
Frankfort
Shelbyville
Carrollton
Owenton
Madison
Scottsburg
Bedford
Vincennes
Washington
Bloomington
Terre Haute
Greencastle
Rushville
Greensburg
Columbus
Sullivan
Princeton
Mt. Vernon
Evansville
Huntingburg
New Albany
Jeffersonville
Corydon
Salem
Paoli
Orleans
Mitchell
Bedford
Seymour
Madison
Vevay
Aurora
Lawrenceburg
Rising Sun
Cincinnati
Covington
Newport
Middletown
Hamilton
Washington C.H.
Chillicothe
Portsmouth
Ironton
Gallipolis
Ohio R.
West Virginia
Kentucky R.
Cumberland R.
Tennessee R.
Mississippi R.
Ohio R.
Wabash R.
White R.
Green R.
Barren R.
Licking R.
Big Sandy R.
Cumberland Mts.
Pine Mt.
Clinch Mts.
Longitude C West 86° from D Greenwich 85°
Knoxville
Jonesboro
Bristol
Middlesboro
Pineville
Harlan
Barbourville
Corbin
London
Manchester
Hyden
Whitesburg
Hazard
Jackson
Beattyville
Irvine
Richmond
Berea
Kingston
Salyersville
Prestonburg
Pikeville
Louisa
Catlettsburg
Grayson
Olivehill
Flemingsburg
Mays Lick
Maysville
Portsmouth
Ripley
Georgetown
Cynthiana
Paris
Mt. Sterling
Winchester
Nicholasville
Harrodsburg
Danville
Stanford
Lancaster
Versailles
Frankfort
Shelbyville
Carrollton
Owenton
Madison
Scottsburg
Bedford
Vincennes
Washington
Bloomington
Terre Haute
Greencastle
Rushville
Greensburg
Columbus
Sullivan
Princeton
Mt. Vernon
Evansville
Huntingburg
New Albany
Jeffersonville
Corydon
Salem
Paoli
Orleans
Mitchell
Bedford
Seymour
Madison
Vevay
Aurora
Lawrenceburg
Rising Sun
Cincinnati
Covington
Newport
Middletown
Hamilton
Washington C.H.
Chillicothe
Portsmouth
Ironton
Gallipolis
Ohio R.
West Virginia
Kentucky R.
Cumberland R.
Tennessee R.
Mississippi R.
Ohio R.
Wabash R.
White R.
Green R.
Barren R.
Licking R.
Big Sandy R.
Cumberland Mts.
Pine Mt.
Clinch Mts.
Longitude C West 86° from D Greenwich 85°
Knoxville
Jonesboro
Bristol
Middlesboro
Pineville
Harlan
Barbourville
Corbin
London
Manchester
Hyden
Whitesburg
Hazard
Jackson
Beattyville
Irvine
Richmond
Berea
Kingston
Salyersville
Prestonburg
Pikeville
Louisa
Catlettsburg
Grayson
Olivehill
Flemingsburg
Mays Lick
Maysville
Portsmouth
Ripley
Georgetown
Cynthiana
Paris
Mt. Sterling
Winchester


TENNESSEE
Scale of Miles
0 10 20 40 60 80
KENTUCKY
VIRGINIA
NORTH CAROLINA
GEORGIA
ALABAMA
MISSISSIPPI
ARKANSAS
INDIANA
NASHVILLE
Memphis
Chattanooga
Knoxville
Bristol
Johnson City
Clarksville
Columbia
Murfreesboro
Jackson
Brownsville
Union City
Dyersburg
Trenton
Huntingdon
Lexington
Decatur
Humboldt
Paris
Dickson
Franklin
Shelbyville
Tullahoma
Cleveland
Athens
Pulaski
Fayetteville
Lawrenceburg
Columbia
Lewisburg
Winchester
Sewanee
Dayton
Harriman
Kingston
Oak Ridge
Maryville
Sevierville
Newport
Greeneville
Rogersville
Kingsport
Elizabethton
Jonesboro
Tazewell
Middlesboro
Cumberland Gap
Pineville
Barbourville
London
Somerset
Monticello
Williamsburg
Corbin
Harlan
Hazard
Whitesburg
Pikeville
Jenkins
Paintsville
Ashland
Catlettsburg
Ironton
Portsmouth
Maysville
Covington
Cincinnati
Louisville
Frankfort
Lexington
Winchester
Richmond
Irvine
Jackson
McKee
Hindman
Manchester
Mt. Vernon
Campbellsville
Columbia
Glasgow
Bowling Green
Russellville
Scottsville
Burkesville
Elizabethtown
Hodgenville
Lebanon
Springfield
Harrodsburg
Danville
Stanford
Somerset
Owensboro
Henderson
Evansville
Madisonville
Central City
Hopkinsville
Princeton
Eddyville
Paducah
Cairo
Dexter
Benton
Mayfield
Murray
Hickman
Fulton
Union City
Dresden
Martin
Trimble
Huntingdon
Parsons
Waverly
Erin
Charlotte
Ashland City
Clarksville
Springfield
Greenbrier
Adams
Cedarhill
Mitchellville
New Providence
Goodlettsville
Gallatin
Hartsville
Lebanon
Carthage
Dixon Springs
Gainesboro
Jamestown
Livingston
Crawford
Celina
Byrdstown
Pall Mall
Allardt
Jacksboro
Wartburg
Oliver Springs
Clinton
Norris
Lake City
Rocky Top
Caryville
Jellico
Williamsburg
Whitley City
Stearns
Albany
Burkesville
Tompkinsville
Glasgow
Scottsville
Franklin
Brentwood
Nashville
Antioch
Dowelltown
Pomona
Cookeville
Isoline
Sunbright
Oneida
Huntsville
Jamestown
Allardt
Wilder
Fentress
Pickett
Overton
Putnam
White
Jackson
Macon
Smith
Trousdale
Sumner
Wilson
Rutherford
Cannon
Coffee
Warren
Grundy
Marion
Sequatchie
Bledsoe
Rhea
Meigs
Roane
Anderson
Campbell
Scott
Morgan
Fentress
Overton
Pickett
Clay
Jackson
Smith
Trousdale
Wilson
Rutherford
Cannon
Coffee
Warren
Grundy
Marion
Sequatchie
Bledsoe
Rhea
Meigs
Roane
Anderson
Campbell
Scott
Morgan
Union
Claiborne
Hancock
Hawkins
Sullivan
Carter
Johnson
Unicoi
Washington
Greene
Hamblen
Jefferson
Cocke
Sevier
Blount
Knox
Loudon
Monroe
Polk
McMinn
Bradley
Hamilton
Chattanooga
Cleveland
Benton
Ducktown
Copperhill
Hayesville
Blairsville
Blue Ridge
Ellijay
Springplace
Dalton
Chatsworth
Calhoun
Cartersville
Rome
Summerville
Trion
Lafayette
Ft. Payne
Gadsden
Attalla
Warrior
Cullman
Jasper
Amory
Tupelo
Oxford
Water Valley
Sheffield
Florence
Decatur
Huntsville
Scottsboro
Russellville
Booneville
Ripley
Holly Springs
Hernando
Memphis
Arlington
Somerville
Collierville
Grand Jc.
Selmer
Adamsville
Pocahontas
Bolivar
Toone
Denmark
Jackson
Humboldt
Trenton
Dyersburg
Halls
Friendship
Ripley
Alamo
Curve
Dyer
Rutherford
Newbern
Trimble
Dresden
Martin
Tiptonville
Gibson
Rives
Troy
Crockett
Oblon
Sharon
Paris
Big Sandy
Erin
Waverly
McKenzie
Bradford
Milan
Medina
Brighton
Covington
Millington
Vildo
Mason
Ina
Toone
Bolivar
Saltillo
Henderson
Denmark
Decatur
Lexington
Jackson
Brownsville
Humboldt
Trenton
Huntingdon
Parsons
Waverly
Erin
Charlotte
Ashland City
Clarksville
Springfield
Greenbrier
Adams
Cedarhill
Mitchellville
New Providence
Goodlettsville
Gallatin
Hartsville
Lebanon
Carthage
Dixon Springs
Gainesboro
Jamestown
Livingston
Crawford
Celina
Byrdstown
Pall Mall
Allardt
Jacksboro
Wartburg
Oliver Springs
Clinton
Norris
Lake City
Rocky Top
Caryville
Jellico
Williamsburg
Whitley City
Stearns
Albany
Burkesville
Tompkinsville
Glasgow
Scottsville
Franklin
Brentwood
Nashville
Antioch
Dowelltown
Pomona
Cookeville
Isoline
Sunbright
Oneida
Huntsville
Jamestown
Allardt
Wilder
Fentress
Pickett
Overton
Putnam
White
Jackson
Macon
Smith
Trousdale
Sumner

OHIO
Scale of Miles
0 10 20 30 40 50 60
Longitude 83° West from Greenwich
A 84° B 83° C 82° D 81° E
MICHIGAN
ONTARIO
Lake St. Clair
LAKE ERIE
PT. PELEE I.
Detroit
Toledo
Cleveland
Akron
Youngstown
Canton
Mansfield
Lima
Findlay
Marion
Springfield
COLUMBUS
Zanesville
Dayton
Cincinnati
Portsmouth
Chillicothe
Steubenville
Wheeling
Parkersburg
Marietta
Ironton
Ohio R.
Scioto R.
Muskingum R.
Hocking R.
Maumee R.
Sandusky
Fremont
Norwalk
Elyria
Lorain
Ashtabula
Conneaut
Erie
Meadville
Warren
Ravenna
Kent
Orrville
Wooster
Mt. Vernon
Newark
Lancaster
Circleville
Athens
Pomeroy
Gallipolis
Ashland
Shelby
Bucyrus
Delaware
Xenia
Springfield
Hamilton
Middletown
Piqua
Troy
Sidney
Bellefontaine
Urbana
Greenville
Richmond
Connersville
Lawrenceburg
Aurora
Madison
Jeffersonville
New Albany
Corydon
Evansville
Vincennes
Terre Haute
Indianapolis
Anderson
Muncie
Fort Wayne
Huntington
Wabash
Peru
Logansport
Kokomo
Marion
Crawfordsville
Lafayette
Rensselaer
Michigan City
Gary
Hammond
Chicago
Kankakee
Joliet
Aurora
Elgin
Rockford
Freeport
Dubuque
Davenport
Rock Island
Galesburg
Peoria
Bloomington
Decatur
Springfield
Jacksonville
Quincy
Hannibal
Keokuk
Burlington
Ottumwa
Centerville
Chariton
Creston
Council Bluffs
Omaha
Lincoln
Beatrice
Hastings
Grand Island
Kearney
North Platte
Ogallala
Sidney
Cheyenne
Scottsbluff
Alliance
Chadron
Valentine
Rushville
Gordon
Ainsworth
Norfolk
Fremont
Blair
Tekamah
Sioux City
Yankton
Vermillion
Sioux Falls
Mitchell
Huron
Aberdeen
Watertown
Brookings
Redfield
Pierre
Mobridge
Bismarck
Dickinson
Glendive
Miles City
Billings
Livingston
Bozeman
Butte
Helena
Great Falls
Havre
Glasgow
Williston
Minot
Devils Lake
Grand Forks
Fargo
Jamestown
Valley City
Wahpeton
Moorhead
Detroit Lakes
Crookston
Thief River Falls
Bemidji
Brainerd
Duluth
Superior
Ashland
Hurley
Ironwood
Marquette
Escanaba
Menominee
Green Bay
Oshkosh
Fond du Lac
Sheboygan
Manitowoc
Two Rivers
Kewaunee
Door Peninsula
Milwaukee
Racine
Kenosha
Waukegan
Evanston
Cicero
Oak Park
Maywood
Hyde Park
Englewood
Blue Island
Joliet
Streator
Ottawa
La Salle
Peru
Princeton
Kewanee
Galesburg
Monmouth
Rock Island
Moline
East Moline
Clinton
Cedar Rapids
Iowa City
Marshalltown
Grinnell
Des Moines
Ames
Boone
Fort Dodge
Webster City
Mason City
Clear Lake
Spencer
Storm Lake
Sioux City
Le Mars
Cherokee
Sheldon
Spirit Lake
Estherville
Algona
Emmetsburg
Forest City
Charles City
Waterloo
Cedar Falls
Independence
Oelwein
Decorah
Waukon
Postville
Elkader
Strawberry Point
Manchester
Dyersville
Maquoketa
Clinton
Fulton
Sterling
Rock Falls
Dixon
Amboy
Mendota
Ottawa
Morris
Joliet
Lockport
Plainfield
Naperville
Wheaton
Elgin
Aurora
Batavia
Geneva
St. Charles
Elmhurst
Hinsdale
Downers Grove
Lombard
Glen Ellyn
Wheaton
Winfield
Naperville
Lisle
Downers Grove
Hinsdale
Oak Brook
Elmhurst
Addison
Bensenville
Des Plaines
Park Ridge
Niles
Skokie
Evanston
Wilmette
Kenilworth
Winnetka
Glencoe
Highland Park
Lake Forest
Waukegan
North Chicago
Zion
Beloit
Janesville
Whitewater
Elkhorn
Delavan
Lake Geneva
Burlington
Racine
Kenosha
Pleasant Prairie
Somers
Kenosha
Union Grove
Waterford
Rochester
Burlington
Wind Lake
Waterford
Mukwonago
Eagle
Whitewater
Fort Atkinson
Jefferson
Watertown
Waukesha
Pewaukee
Hartland
Oconomowoc
Lake Mills
Johnson Creek
Watertown
Juneau
Beaver Dam
Horicon
Mayville
Kewaskum
West Bend
Hartford
Slinger
Germantown
Menomonee Falls
Brookfield
Elm Grove
Wauwatosa
West Allis
Milwaukee
Cudahy
South Milwaukee
St. Francis
Oak Creek
Franklin
Muskego
New Berlin
Waukesha
Brookfield
Pewaukee
Menomonee Falls
Germantown
Slinger
West Bend
Kewaskum
Fond du Lac
Ripon
Berlin
Omro
Oshkosh
Neenah
Menasha
Appleton
Kaukauna
Little Chute
Kimberly
Combined Locks
Wrightstown
De Pere
Green Bay
Allouez
Howard
Suamico
Pulaski
Shawano
Gillett
Oconto
Oconto Falls
Marinette
Peshtigo
Crivitz
Wausaukee
Niagara
Iron Mountain
Kingsford
Norway
Quinnesec
Florence
Crystal Falls
Iron River
Stambaugh
Caspian
Ironwood
Bessemer
Wakefield
Hurley
Ashland
Washburn
Bayfield
Red Cliff
Cornucopia
Port Wing
Superior
Duluth
Two Harbors
Silver Bay
Beaver Bay
Grand Marais
Grand Portage
Thunder Bay
Fort William
Port Arthur
Nipigon
Schreiber
Rossport
Michipicoten
Sault Ste. Marie
Soo Canal
Sault Ste. Marie
Algoma
Blind River
Spanish
Espanola
Little Current
Manitoulin I.
Gore Bay
Mindemoya
Kagawong
Providence Bay
Killarney
Whitefish I.
Sudbury
Copper Cliff
Wahnapitae
Chapleau
Foleyet
Biscotasing
Gogama
Timagami
Cobalt
New Liskeard
Haileybury
North Bay
Callander
Powassan
Trout Creek
Burk's Falls
Sundridge
South River
Huntsville
Bracebridge
Gravenhurst
Port Carling
Rosseau
Parry Sound
Byng Inlet
Key Harbour
Pointe au Baril
Midland
Penetanguishene
Victoria Harbour
Port McNicoll
Waubaushene
Orillia
Coldwater
Barrie
Allandale
Bradford
Newmarket
Aurora
Richmond Hill
Thornhill
Toronto
Mimico
New Toronto
Port Credit
Streetsville
Brampton
Georgetown
Acton
Guelph
Galt
Preston
Hespeler
Kitchener
Waterloo
New Hamburg
Baden
Wellesley
St. Jacobs
Elmira
Wallenstein
Breslau
Linwood
Hawkesville
Conestogo
Drayton
Palmerston
Harriston
Mount Forest
Arthur
Fergus
Elora
Alma
Rockwood
Eden Mills
Hespeler
Ayr
Paris
Brantford
Tillsonburg
Ingersoll
Woodstock
Norwich
Tavistock
Stratford
Shakespeare
Milverton
Listowel
Wingham
Blyth
Clinton
Seaforth
Exeter
Hensall
Zurich
Bayfield
Goderich
Kincardine
Port Elgin
Southampton
Walkerton
Hanover
Durham
Owen Sound
Meaford
Thornbury
Collingwood
Stayner
Wasaga Beach
Creemore
Alliston
Beeton
Tottenham
Bolton
Caledon East
Orangeville
Shelburne
Dundalk
Flesherton
Markdale
Chatsworth
Hepworth
Tara
Southampton
Port Elgin
Saugeen
Paisley
Chesley
Walkerton
Hanover
Durham
Mount Forest
Arthur
Fergus
Elora
Alma
Rockwood
Eden Mills
Guelph
Galt
Preston
Hespeler
Kitchener
Waterloo
New Hamburg
Baden
Wellesley
St. Jacobs
Elmira
Wallenstein
Breslau
Linwood
Hawkesville
Conestogo
Drayton
Palmerston
Harriston

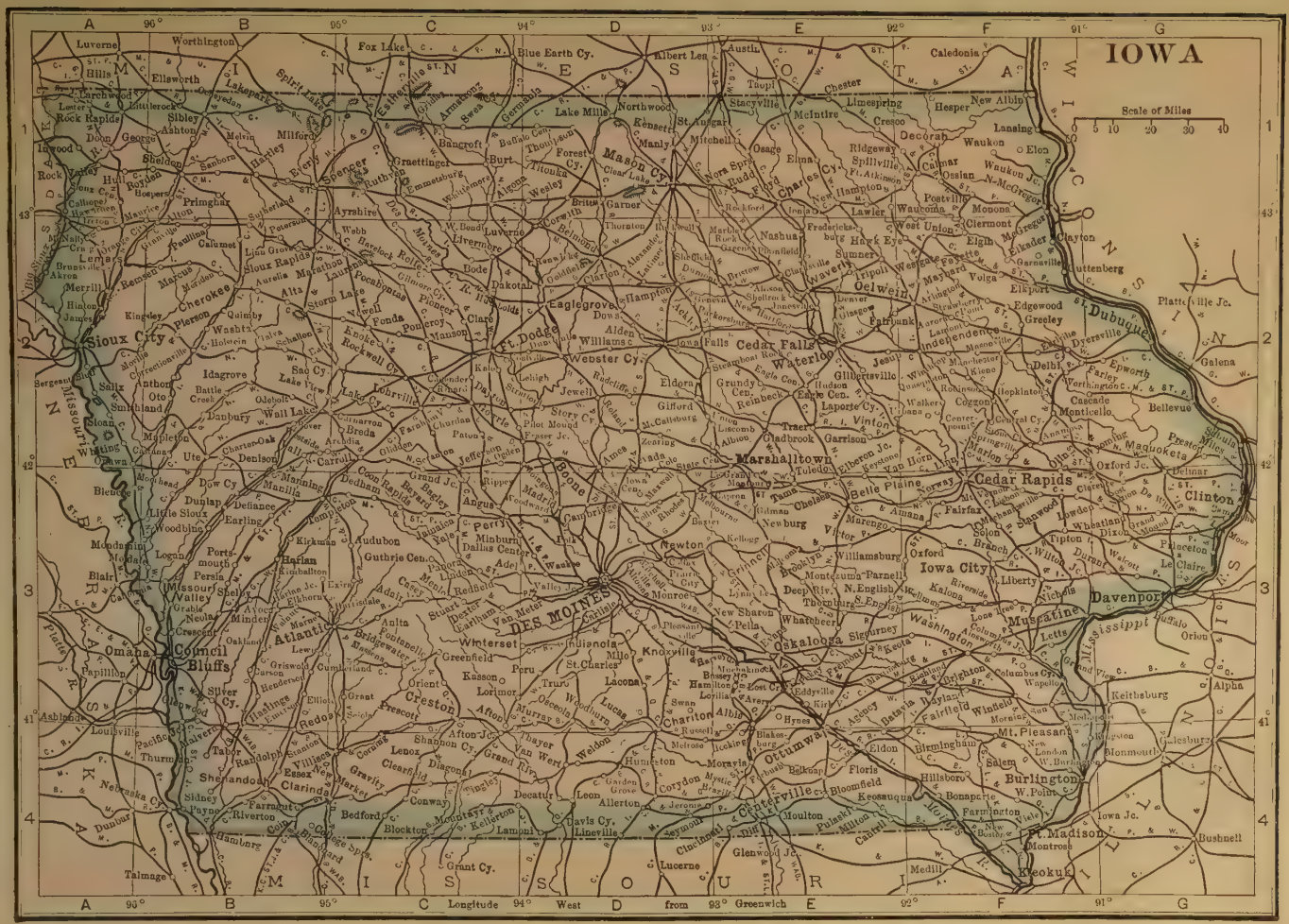

INDIANA
Scale of Miles
0 5 10 20 30 40 50
Longitude 86° 30' West from Greenwich
Lake Michigan
Michigan City
Elkhart
Logansport
Marion
Wabash
Elwood
Anderson
Indianapolis
Richmond
Connersville
Terre Haute
Vincennes
Evansville
New Albany
Jeffersonville
Madison
Lawrenceburg
Aurora
Rising Sun
Mauckport
Rockport
Tell City
Cannelton
Leopold
Magnet
Derby
Troy
Madrid
Celina
Fredonia
Leavenworth
Corydon
Lanesville
Kings Creek
New Amsterdam
Elizabeth
Salem
Scottsburg
Campbellsburg
Orleans
Paoli
Hardinsburg
Memphis
Henryville
Otisco
Owen
Bethlehem
Charlestown
Sellersburg
Utica
Georgetown
Milltown
Bridgeport
Pekin
Palmyra
Dubois
Youngstown
Ireland
Otwell
Winslow
Petersburg
Mt. Carmel
Princeton
Owensville
Francisco
Huntingburg
Jasper
St. Anthony
Birdseye
Ferdinando
Cynthiana
Lynnville
Elberfeld
Boonville
Chandler
Newburg
Howell
Mt. Vernon
Heidelberg
Oakland City
Petersburg
Winslow
Otwell
Ireland
Dubois
Jasper
Huntingburg
Princeton
Owensville
Francisco
Evansville
Newburgh
Boonville
Elberfeld
Cynthiana
Lynnville
Ft. Branch
Buckskin
Griffin
New Harmony
Poseyville
Mt. Vernon
Heidelberg
Rockport
Tell City
Cannelton
Troy
Madrid
Derby
Magnet
Leopold
Celina
Fredonia
Leavenworth
Corydon
Lanesville
Kings Creek
New Amsterdam
Mauckport
Elizabeth
Salem
Scottsburg
Campbellsburg
Orleans
Paoli
Hardinsburg
Memphis
Henryville
Otisco
Owen
Bethlehem
Charlestown
Sellersburg
Utica
Georgetown
Milltown
Bridgeport
Pekin
Palmyra
Dubois
Youngstown
Ireland
Otwell
Winslow
Petersburg
Mt. Carmel
Princeton
Owensville
Francisco
Huntingburg
Jasper
St. Anthony
Birdseye
Ferdinando
Cynthiana
Lynnville
Elberfeld
Boonville
Chandler
Newburg
Howell
Mt. Vernon
Heidelberg
Rockport
Tell City
Cannelton
Troy
Madrid
Derby
Magnet
Leopold
Celina
Fredonia
Leavenworth
Corydon
Lanesville
Kings Creek
New Amsterdam
Mauckport
Elizabeth
Salem
Scottsburg
Campbellsburg
Orleans
Paoli
Hardinsburg
Memphis
Henryville
Otisco
Owen
Bethlehem
Charlestown
Sellersburg
Utica
Georgetown
Milltown
Bridgeport
Pekin
Palmyra
Dubois
Youngstown
Ireland
Otwell
Winslow
Petersburg
Mt. Carmel
Princeton
Owensville
Francisco
Huntingburg
Jasper
St. Anthony
Birdseye
Ferdinando
Cynthiana
Lynnville
Elberfeld
Boonville
Chandler
Newburg
Howell
Mt. Vernon
Heidelberg
Rockport
Tell City
Cannelton
Troy
Madrid
Derby
Magnet
Leopold
Celina
Fredonia
Leavenworth
Corydon
Lanesville
Kings Creek
New Amsterdam
Mauckport

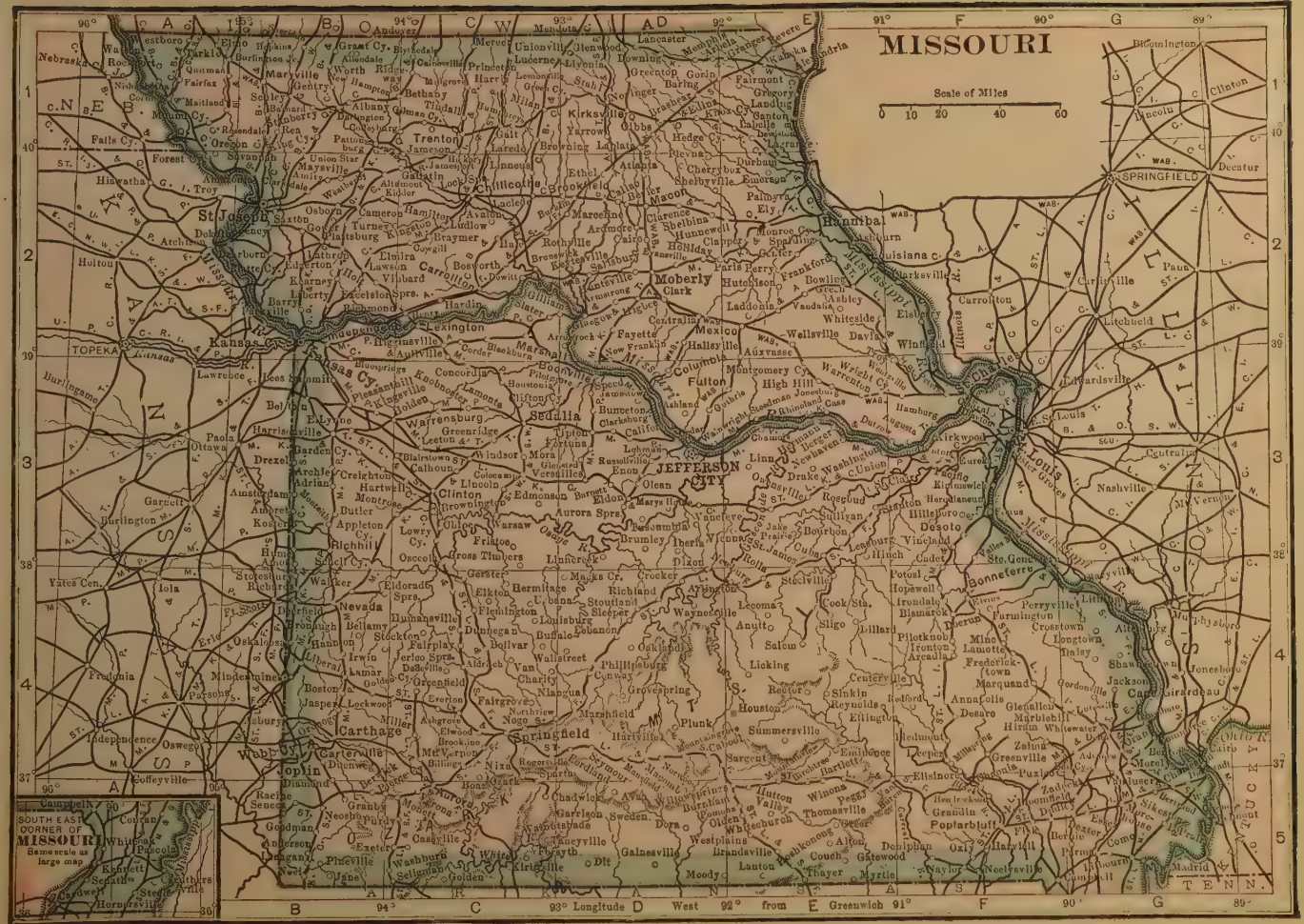
MICHIGAN
Scale of Miles
0 10 20 40 60 80
LAKE SUPERIOR
Elevation above Sea Level 602 feet
LAKE MICHIGAN
Elevation above Sea Level 581 feet
LAKE HURON
Elevation above Sea Level 581 feet
LAKE ERIE
Elevation above Sea Level 573 feet
Keweenaw Pt.
Marquette
Pts. Au Sable
Grand Marais
Whitefish Pt.
Whitefish Bay
Thompson
Charlevoix
Northport
Leland
N. Manitou
S. Manitou
Green Bay
Manistee
Manitowoc
Sheboygan
Ludington
Milwaukee
Muskegon
Grand Haven
Grand Rapids
Holland
Racine
Kenosha
Waukegan
Kalamazoo
Battle Creek
Benton Harbor
St. Joseph
Chicago
New Buffalo
Cadillac
Houghton L.
West Branch
Alpena
Thunder Bay
Harrisville
Bay City
Saginaw
Flint
Port Huron
Lansing
Jackson
Ann Arbor
Detroit
Pontiac
Toledo
Monroe
Pte. Pelee
Pelee I.
Calumet
Longitude West from Greenwich
87°
86°
85°
84°
83°

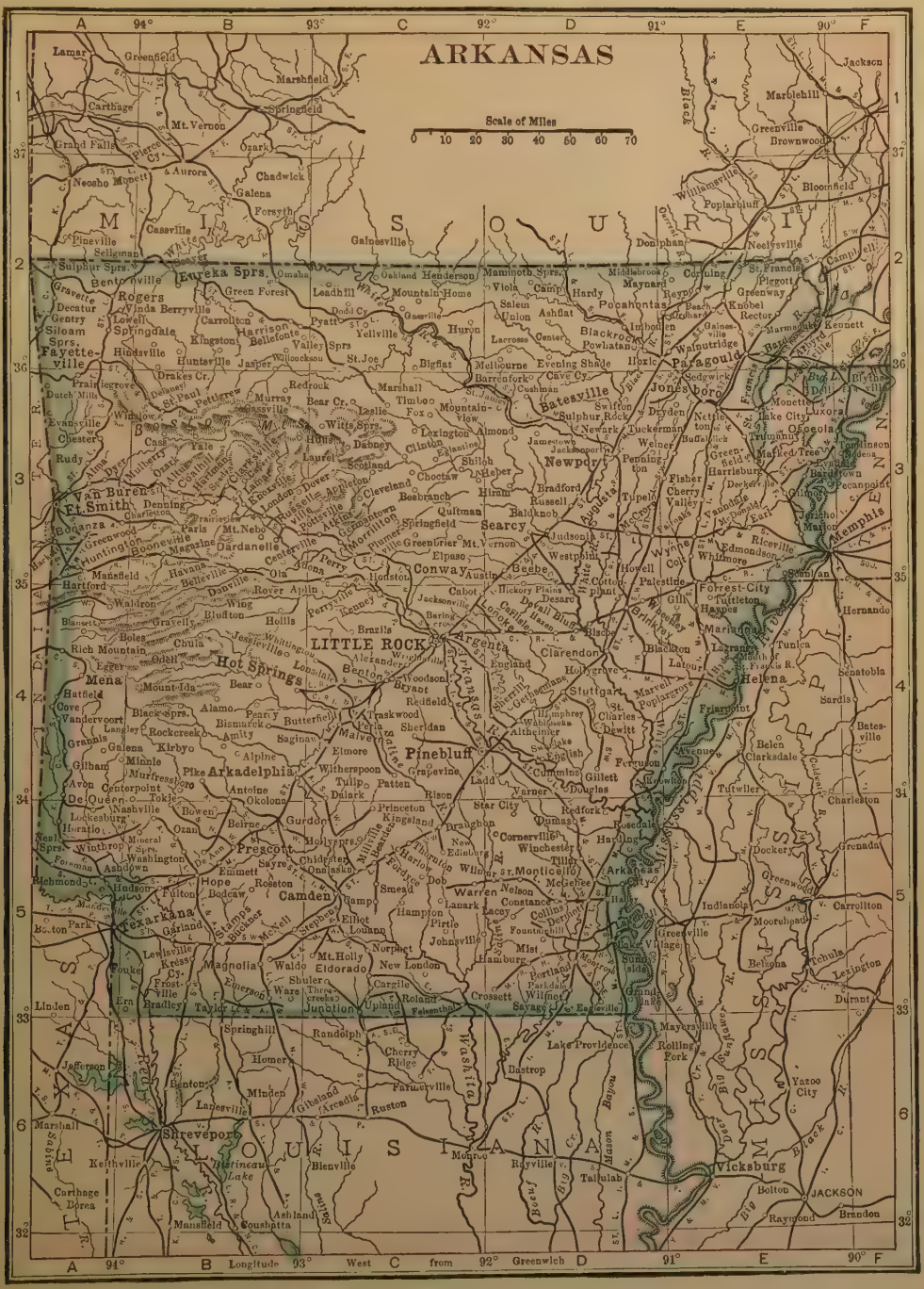
WISCONSIN
Scale of Miles
0 10 20 40 60
Size of type indicates relative importance of places.
C. S. HAMMOND & CO., N.Y.
LAKE SUPERIOR
MICHIGAN
LAKE
Superior
Ashland
Duluth
La Crosse
Eau Claire
Wausau
Rhinelander
Oshkosh
Fond du Lac
Sheboygan
Manitowoc
Green Bay
Marinette
Milwaukee
Racine
Kenosha
MADISON
Beloit
Janesville
Watertown
Portage
Baraboo
Wisconsin Dells
Stevens Point
Marshfield
Menomonie
Chippewa Falls
Rice Lake
Hayward
Ironwood
Antigo
Merrill
Wausaukee
Menominee
Escanaba
Chicago
Rockford
Freeport
Elgin
Waukegan
Kenosha
Racine
Milwaukee
Sheboygan
Manitowoc
Green Bay
Marinette
Escanaba
Ontonagon
Houghton
Hancock
Calumet
Marquette
Negaunee
Ishpeming
Republic
Iron Mtn.
Menominee
Peshtigo
Oconto
Algoma
Kewaunee
Two Rivers
Port Washington
Cedarburg
West Bend
Hartford
Watertown
Fort Atkinson
Whitewater
Elkhorn
Lake Geneva
Delavan
Burlington
Janesville
Beloit
Rockford
Freeport
Galena
Dubuque
Prairie du Chien
Wabasha
Red Wing
Hastings
Stillwater
St. Croix Falls
Superior
Duluth
Ashland
Hurley
Iron River
Ironwood
Bessemer
Wakefield
Ontonagon
Houghton
Hancock
Calumet
Allouez Mills
Eagle River
Florence
Crystal Falls
Iron Mtn.
Escanaba
Manistique
Gladstone
Menominee
Marinette
Peshtigo
Oconto
Algoma
Kewaunee
Two Rivers
Manitowoc
Sheboygan
Port Washington
Milwaukee
Racine
Kenosha
Waukegan
Chicago
Rockford
Freeport
Galena
Dubuque
Prairie du Chien
La Crosse
Wabasha
Red Wing
Hastings
Stillwater
St. Croix Falls
Superior
Duluth
Ashland
Hurley
Iron River
Ironwood
Bessemer
Wakefield
Ontonagon
Houghton
Hancock
Calumet
Allouez Mills
Eagle River
Florence
Crystal Falls
Iron Mtn.
Escanaba
Manistique
Gladstone
Menominee
Marinette
Peshtigo
Oconto
Algoma
Kewaunee
Two Rivers
Manitowoc
Sheboygan
Port Washington
Milwaukee
Racine
Kenosha
Waukegan
Chicago
Rockford
Freeport
Galena
Dubuque
Prairie du Chien
La Crosse
Wabasha
Red Wing
Hastings
Stillwater
St. Croix Falls
91° Longitude West from Greenwich
90°
89°
88°
92°

ILLINOIS
SPRINGFIELD
Chicago
Evanston
Rockford
Freeport
Dubuque
Galena
Rock Island
Moline
Davenport
Peoria
Bloomington
Decatur
Champaign
Danville
Kankakee
Aurora
Elgin
Joliet
Waukegan
Quincy
Alton
St. Louis
E. St. Louis
Belleville
Centralia
Mt. Vernon
Carbondale
Cairo
Galesburg
Ottawa
Streator
Pontiac
Lincoln
Jacksonville
Beardstown
Havana
Pekin
Mattoon
Charleston
Effingham
Olney
Robinson
Terre Haute
Vincennes
Evansville
Henderson
Owensboro
Paducah
Princeton
Hopkinsville
Clarksville
Nashville
Springfield
Jefferson City
Missouri R.
Mississippi R.
Ohio R.
Wabash R.
Illinois R.
Kaskaskia R.
Big Muddy R.
Lake Michigan
Indiana
Kentucky
Iowa
Wisconsin
Missouri
Scale of Miles
0 5 10 20 30 40 50 60
Longitude 90° West from 89° Greenwich

NORTHEASTERN PART OF MINNESOTA
Same scale as large map
Grand Portage
Hovland
Grand Marais
LAKE SUPERIOR
Schroeder
MANITOBA
DOMINION OF CANADA
ONTARIO
Lake of the Woods
Rainy Lake
Rainy River
Lake Superior
Duluth
Superior
Minneapolis
ST. PAUL
MINNESOTA
NORTH DAKOTA
SOUTH DAKOTA
WISCONSIN
IOWA
Red Lake
Lower Red Lake
Leech L.
Mille Lacs
Scale of Miles
0 10 20 40 60
Size of type indicates relative importance of places.
Longitude
West 94° from Greenwich


IOWA
Scale of Miles
0 5 10 20 30 40
Longitude 96° West from Greenwich
Sioux City
Council Bluffs
Omaha
DES MOINES
Cedar Rapids
Davenport
Clinton
Dubuque
Waterloo
Marshalltown
Iowa City
Burlington
Ft. Madison
Keokuk
Creston
Atlantic
Harlan
Shenandoah
Red Oak
Clarinda
Corning
Ottumwa
Oskaloosa
Newton
Grinnell
Webster City
Ft. Dodge
Eagle Grove
Mason City
Charles City
Decorah
Waukon
Elkader
Clayton
Guttenberg
Monticello
Maquoketa
Oxford Jc.
Tipton
Wilton Jc.
Muscatine
Washington
Mt. Pleasant
Fairfield
Ottumwa
Centerville
Chariton
Albia
Knoxville
Indianola
Winterset
Adel
Perry
Boone
Ames
Nevada
Story City
Iowa Falls
Alden
Williams
Eldora
Gilbertsville
Hudson
Independence
Oelwein
Charles City
Nashua
Clear Lake
Manly
Mitchell
Osage
Northwood
Lake Mills
Algona
Emmetsburg
Spirit Lake
Estherville
Armstrong
Gen. Jc.
Fort Dodge
Webster City
Cedar Falls
Waterloo
Marshalltown
Grinnell
Newton
Oskaloosa
Ottumwa
Centerville
Burlington
Ft. Madison
Keokuk
Clinton
Dubuque
Cedar Rapids
Iowa City
Davenport
Muscatine
Missouri R.
Mississippi R.
Des Moines R.
Iowa R.
Cedar R.
Wisconsin R.
Illinois
Missouri
Nebraska
South Dakota
Minnesota

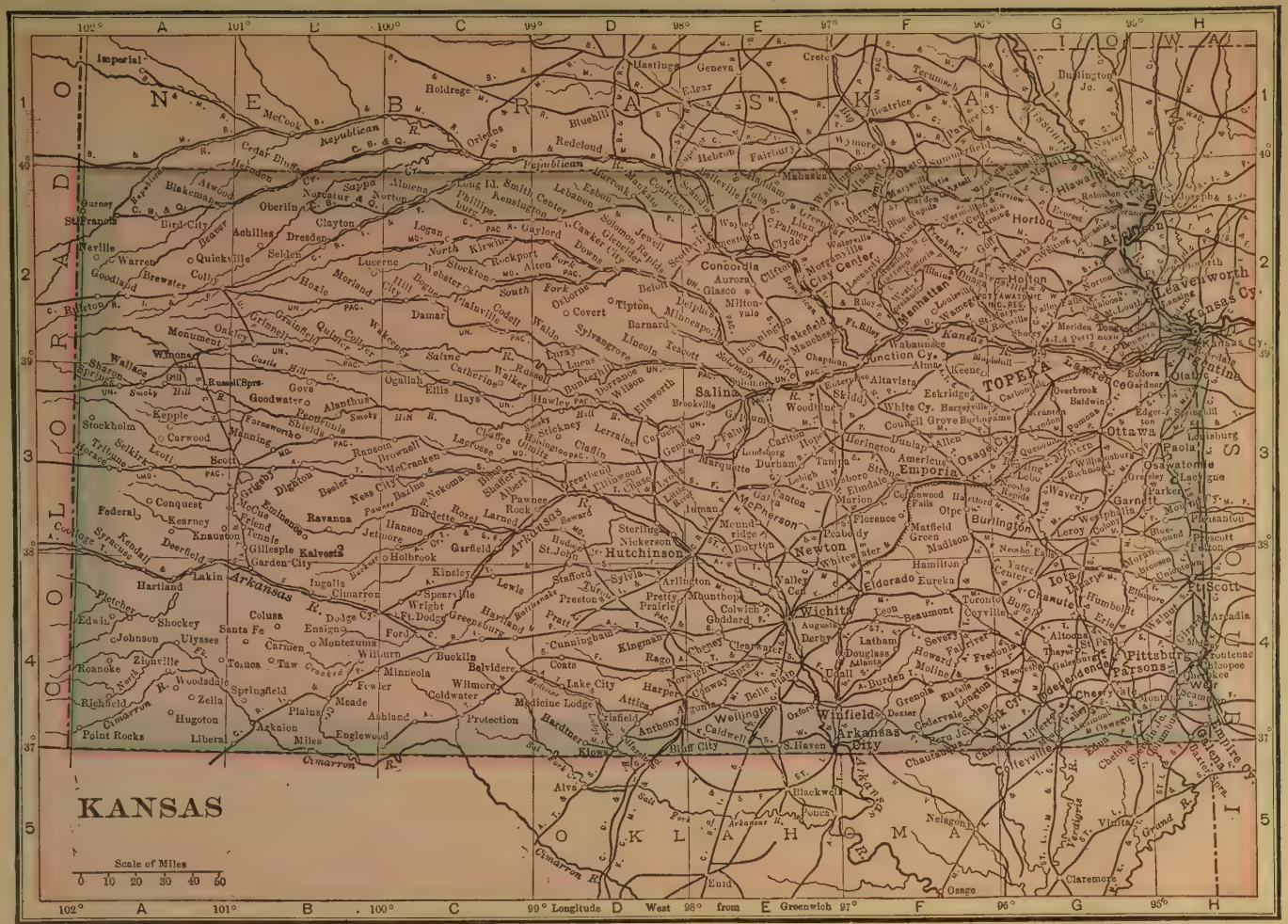

MISSOURI
Scale of Miles
0 10 20 40 60
SOUTH EAST CORNER OF MISSOURI
Same scale as large map
Longitude West from Greenwich
St. Louis
Kansas City
Jefferson City
Springfield
Carthage
St. Joseph
Joplin
Hannibal
Moberly
Sedalia
Columbia
Fulton
Nevada
Webb City
Carterville
Monett
Aurora
Marshfield
Mountain Grove
Ozark
Willow Springs
Thayer
Alton
Poplar Bluff
Doniphan
Gatewood
Naylor
Neelyville
Piedmont
Ellsinore
Greenville
Zalma
Puxico
Dexter
Bernie
Parma
Portageville
Malden
Caruthersville
Hayti
Kennett
Senath
Hornersville
Cardwell
Campbell
Gideon
Matthews
Morehouse
Sikeston
Charleston
Commerce
Scott City
Cape Girardeau
Jackson
Chaffee
Oran
Perryville
Farmington
Ste. Genevieve
Bonne Terre
Desloge
Flat River
Leadwell
Mine La Motte
Fredericktown
Marquand
Annapolis
Glenallen
Marble Hill
Hiram
Whitewater
Advance
Bloomfield
Dudley
Puxico
Kelso
Benton
Sikeston
Morley
Blodgett
Oran
Delta
Commerce
Gordonville
Jackson
Cape Girardeau
Shawneetown
Jonesboro
Trenton
Chillicothe
Brookfield
Macon
Kirksville
Milan
Princeton
Unionville
Lancaster
Memphis
Revere
Kahoka
Wyaconda
Canton
La Grange
Palmyra
Monroe City
Shelbina
Clarence
Shelbyville
Emerson
Durham
Cherry Box
Hedge
Gibbs
Yarrow
Galt
Laredo
Browning
Laplata
Atlanta
Ethel
Linneus
Gallatin
Jamesport
Winston
Jameson
Mayville
Union Star
Stanberry
Gentry
Albany
Bethany
Maitland
Pattonsburg
Lathrop
Edgerton
Plattsburg
Turney
Gower
Osborn
Sexton
Cameron
Hamilton
Avalon
Ludlow
Braymer
Kidder
Altamont
Jamesport
Gilman City
Hardin
Richmond
Excelsior Spgs.
Liberty
Barry
Kearney
Holton
Oregon
Forest City
Maryville
Quitman
Fairfax
Rosendale
Skidmore
Amazonia
Hiawatha
Troy
Wright City
Warrenton
Truxton
Foley
Elsberry
Clarksville
Louisiana
Bowling Green
Frankford
Middletown
Ashley
Vandalia
Laddonia
Hutchinson
Paris
Perry
Centralia
Hallsville
Auxvasse
Mexico
Wellsville
Davis
Whiteside
Winfield
Elsberry
Carrollton
Litchfield
Carlinville
Paul
Decatur
Springfield
Clinton
Lincoln
Pana
Taylorville
Hillsboro
Vandalia
Greenville
Nashville
Mt. Vernon
Centralia
Kirkwood
Webster Groves
Valley Park
Meramec Highlands
Pacific
Eureka
Wildwood
Ballwin
Manchester
Ellisville
Clarkson Valley
Chesterfield
Creve Coeur
Maryland Heights
Florissant
Hazelwood
Ferguson
Jennings
Normandy
Wellston
Pagedale
Overland
Clayton
Richmond Heights
Brentwood
Maplewood
Webster Groves
Kirkwood
Glendale
Rock Hill

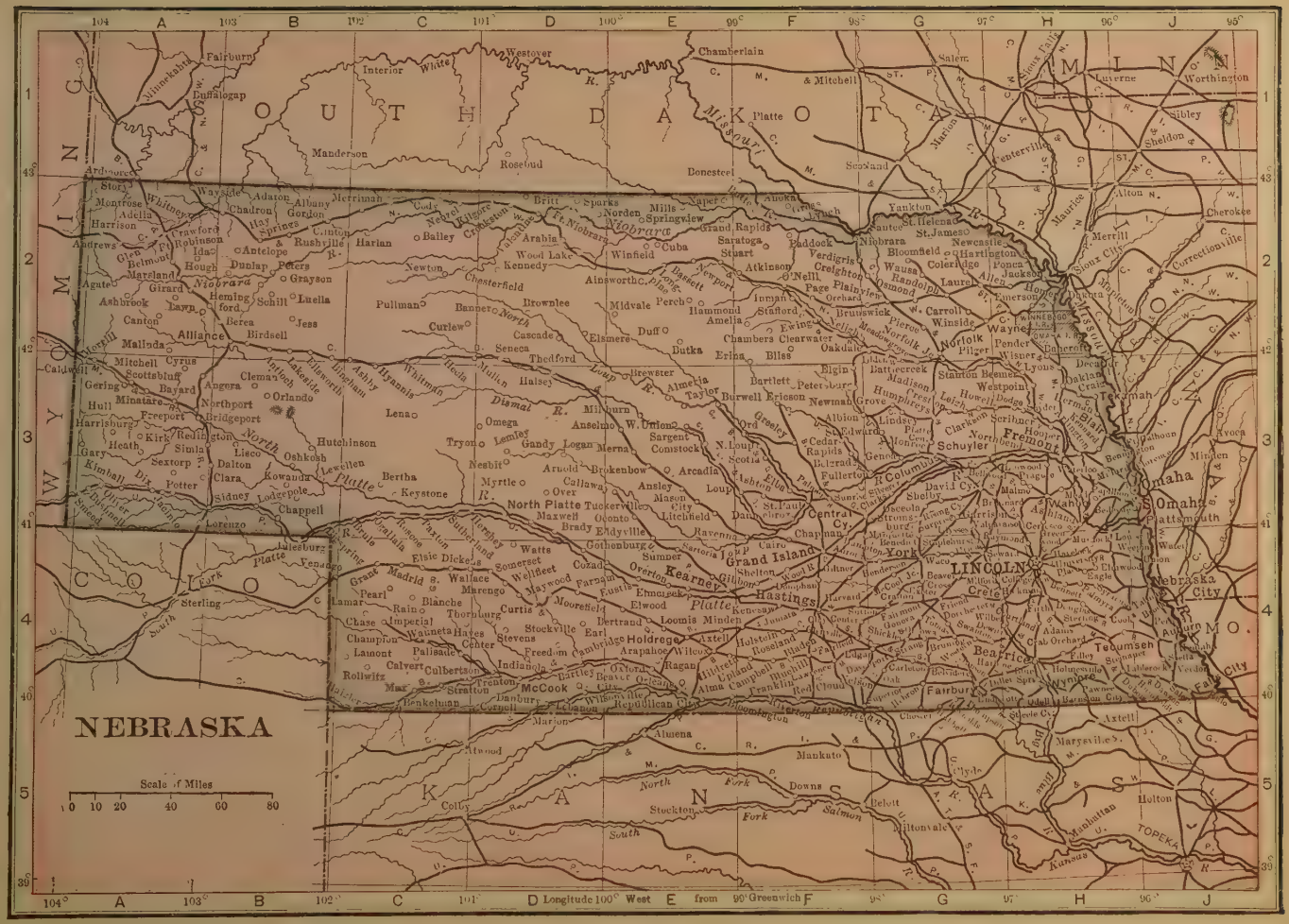

ARKANSAS
Scale of Miles
0 10 20 30 40 50 60 70
MISSOURI
LITTLE ROCK
Hot Springs
Pine Bluff
Arkadelphia
Prescott
Camden
Texarkana
Fayetteville
Rogers
Springdale
Eureka Spgs.
Harrison
Bentonville
Siloam Spgs.
Batesville
Jonesboro
Paragould
Newport
Searcy
Conway
Van Buren
Ft. Smith
Dardanelle
Russellville
Clarksville
Morrilton
Greenwood
Paris
Mt. Nebo
Magazine
Booneville
Waldron
Mansfield
Hartford
Blufton
Hollis
Mena
Hatfield
Cove
Vandervoort
Black Spgs.
Rockcreek
Amity
Graysonia
Galena
Kirbyo
Gilham
Minnie
Murfreesboro
Pike
Avon
Centerpoint
De Queen
Tokio
Nashville
Bowen
Lockesburg
Horatio
Ozan
Winthrop
Mineral Spgs.
Washington
Ashdown
Foreman
Mchmond
Hope
Bodcaw
Fulton
Hudson
Saratoga
Boston
Garland
Stamps
Bradley
Taylor
Magnolia
Waldo
Eldorado
Louann
Norphlet
Smackover
Calion
Junction
Uplands
Ruston
Shreveport
Mooringsport
Keithville
Carthage
Dorcas
Mansfield
Coushatta
Minden
Gibsland
Arcadia
Lanesville
Homer
Springhill
Jefferson
Marshall
Benton
Bryant
Alexander
Wrightsville
Benton
Woodson
Redfield
Sheridan
Grapevine
Tulip
Dalark
Rison
Princeton
Kingsland
Gurdon
Prescott
Okolona
Antoine
Pattenville
Witherspoon
Elmore
Alpine
Malvern
Traskwood
Bismarck
Saginaw
Alamo
Pearcy
Butterfield
Hollywood
Whittington
Jessieville
Odell
Rich Mountain
Chula
Boles
Gravelly
Blansett
Wing
Rover
Aplin
Danville
Belleville
Havana
Ola
Perry
Perryville
Adona
Houston
Casa
Yale
Drakes Cr.
Frankfort
Dutch Mills
Evansville
Winslow
Chester
Rudy
Alma
Dyer
Mulberry
Oark
Huntington
Parkdale
Hackett
Hartford
Greenwood
Huntington
Bonanza
Chester
Cass
Dutch Mills
Frankfort
Drakes Cr.
Huntsville
Jasper
Valley Spgs
Hindsville
Kingston
Bellefonte
Pratt
Yellville
Lowell
Springdale
Gentry
Decatur
Gravette
Sulphur Spgs.
Bentonville
Rogers
Vinda
Berryville
Carrollton
Green Forest
Leadhill
Omaha
Oakland
Henderson
Mountain Home
Gassville
Dodd Cy
Pyatt
Valley Spgs
Willcockson
St. Joe
Bigfat
Melbourne
Evening Shade
Cave Cy.
Barren Fork
Cushman
Timbo
Mountain View
Leslie
Fox
Lexington
Almond
Jamestown
Jacksonport
Newport
Cotton Plant
Hickory Plains
Desarc
Drall Bluff
Cleveland
Beebranch
Quitman
Hiram
Bradford
Russell
Baldknob
Judsonia
Westphill
Searcy
Springfield
Greenbrier
Mt. Vernon
Conway
Austin
Beebe
Cabot
Jacksonville
Lonoke
Carlisle
Scott

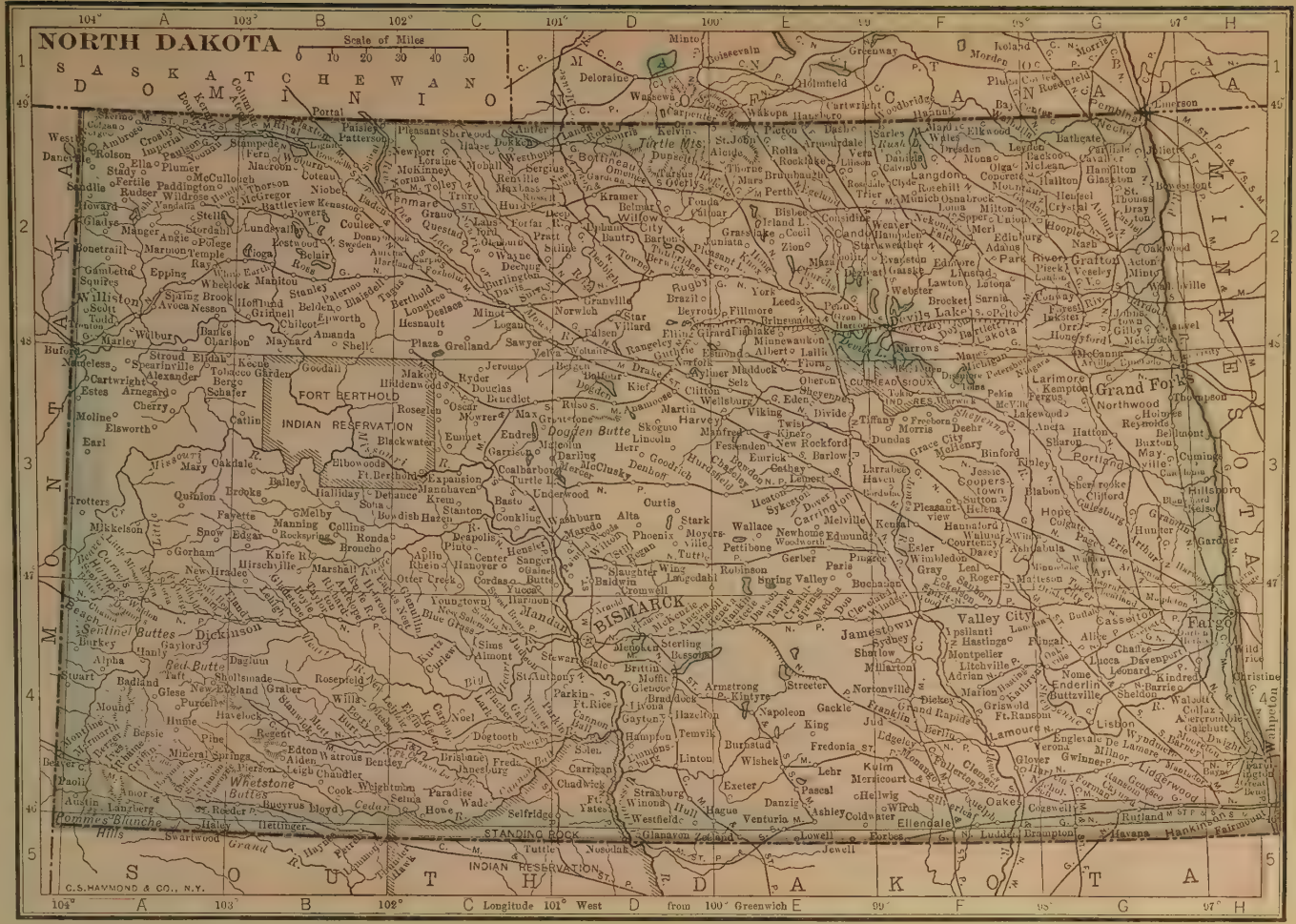
LOUISIANA
Scale of Miles
0 10 20 30 40 50 60 70
Size of type indicates relative importance of places
GULF OF MEXICO
MISSISSIPPI
ALABAMA
TEXAS
ARKANSAS
Mississippi R.
Red R.
Black R.
Pascagoula R.
Pearl R.
Atchafalaya Bay
Vermilion Bay
Grand L.
White L.
Calcasieu L.
Caddo L.
Lake Pontchartrain
Lake Borgne
Lake Maurepas
Lake Providence
Lake Charles
Lake Arthur
Lake Sabine
Sabine Pass
Mississippi Sound
Chandeleur Sound
Breton Sound
Barataria Bay
Terrebonne Bay
Timbalier Bay
Caillou Bay
Calcasieu Pass
Grand Pass
North Pass
South Pass
North East Pass
South East Pass
South West Pass
Delta of the Mississippi
Shreveport
Minden
Monroe
Ruston
Natchitoches
Alexandria
Pineville
Leesville
Opelousas
Washington
Jackson
St. Francisville
Clinton
Baton Rouge
Port Hudson
Plaquemine
Donaldsonville
Thibodaux
Houma
New Orleans
Lafayette
Abbeville
Jennings
Crowley
Rayne
Vinton
Westlake
Sulphur
Orange
Beaumont
Port Arthur
Sabine
Hackberry
Grandlake
Creole
Johnsons Bayou
Cameron
Pecan Island
Jeanerette
Franklin
Morgan City
Berwick
Patterson
Amelia
Vacherie
Lockport
Larose
Lafitte
Barataria
Jean Lafitte
Happy Jack
Pointe-a-la-Hache
Venice
Grand Isle
Buras
Port Sulphur
Boothville
Yazoo City
Vicksburg
Jackson
Meridian
Natchez
Tallulah
Delta
Rolling Fork
Lake Providence
Oakgrove
Mer Rouge
Bastrop
Farmerville
Homer
Arcadia
Minden
Coushatta
Mansfield
Many
Leesville
Hornbeck
Florien
Zwolle
Noble
Converse
Many
Natchitoches
Campti
Clarence
Winnfield
Winnsboro
Columbia
Harrisonburg
Tallulah
Lake Providence
Transylvania
Rayville
Oakridge
Calvin
Girard
Jonesboro
Quitman
Mt. Enterprise
Henderson
Overton
Kilgore
Longview
Marshall
Jefferson
Caddo L.
Shreveport
Greenwood
Stonewall
Gloster
Grandcane
Longstreet
Many
Logansport
Port
Timpson
Converse
Watterman
Nacogdoches
San Augustine
Brookhaven
Monticello
Tilton
Norfield
Holmesville
Pernwood
Tylertown
Magnolia
Liberty
Woodville
Kentwood
Amite
Roseland
Independence
Natalbany
Hammond
Ponchatoula
Springfield
Covington
Madisonville
Slidell
Gulfport
Biloxi
Pass Christian
Scranton
Pearl River
St. Louis Bay
Poplarville
Laurel
Ellisville
Saratoga
Silver Cr.
Berkson
Indian Mound
Hattiesburg
Vinegar Bend
Leaksville
Benoumet
Columbia
Tylertown
Franklinton
Bogalusa
Angie
Lumberton
Wilmer
Zona
Bile
Norwood
Clinton
Darlington
Tunnipahoe
Lewisburg
Hackley
Jackson
St. Francisville
Slaughter
Pride
Greenwell Springs
Ginger Group
Grangeville
Albany
Doyle
Natalbany
Zachary
Port Vincent
Springfield
Livingston
Denham Springs
Walker
Watson
Gonzales
Prairieville
Geismar
Sorrento
Donaldsonville
Thibodaux
Napoleonville
Labadieville
Raceland
Lockport
Larose
Lafitte
Barataria
Jean Lafitte
Happy Jack
Pointe-a-la-Hache
Venice
Grand Isle
Buras
Port Sulphur
Boothville
Empire
Buras
Triumph
Neptune
Burrwood
Delacroix
Yscloskey
Shell Beach
Bayou Sauvage
Irish Bayou
Chef Menteur
Rigolets
Pass Manchac
Lake Maurepas
Lake Pontchartrain
Lake Borgne
Chandeleur Islands
Errol Is.
Breton Is.
Gulf of Mexico
Mississippi Sound
Chandeleur Sound
Breton Sound
Barataria Bay
Terrebonne Bay
Timbalier Bay
Caillou Bay
Calcasieu Pass
Grand Pass
North Pass
South Pass
North East Pass
South East Pass
South West Pass
Delta of the Mississippi
C.S. HAMMOND & CO., N.Y.
Longitude West from Greenwich

TEXAS
Scale of Miles
0 25 50 75 100
Size of type indicates relative importance of places.
WESTERN PORTION OF TEXAS
Same Scale as Main Map
NEW MEXICO
OKLAHOMA
ARKANSAS
LOUISIANA
MEXICO
GULF OF MEXICO
Longitude West from Greenwich
C. S. HAMMOND & CO., N.Y.

OKLAHOMA
KANSAS
TEXAS
COLORADO
NEW MEXICO
Scale of Miles
0 10 20 40
WESTERN PORTION OF OKLAHOMA
Longitude West from Greenwich
C. S. HAMMOND & CO., NEW YORK

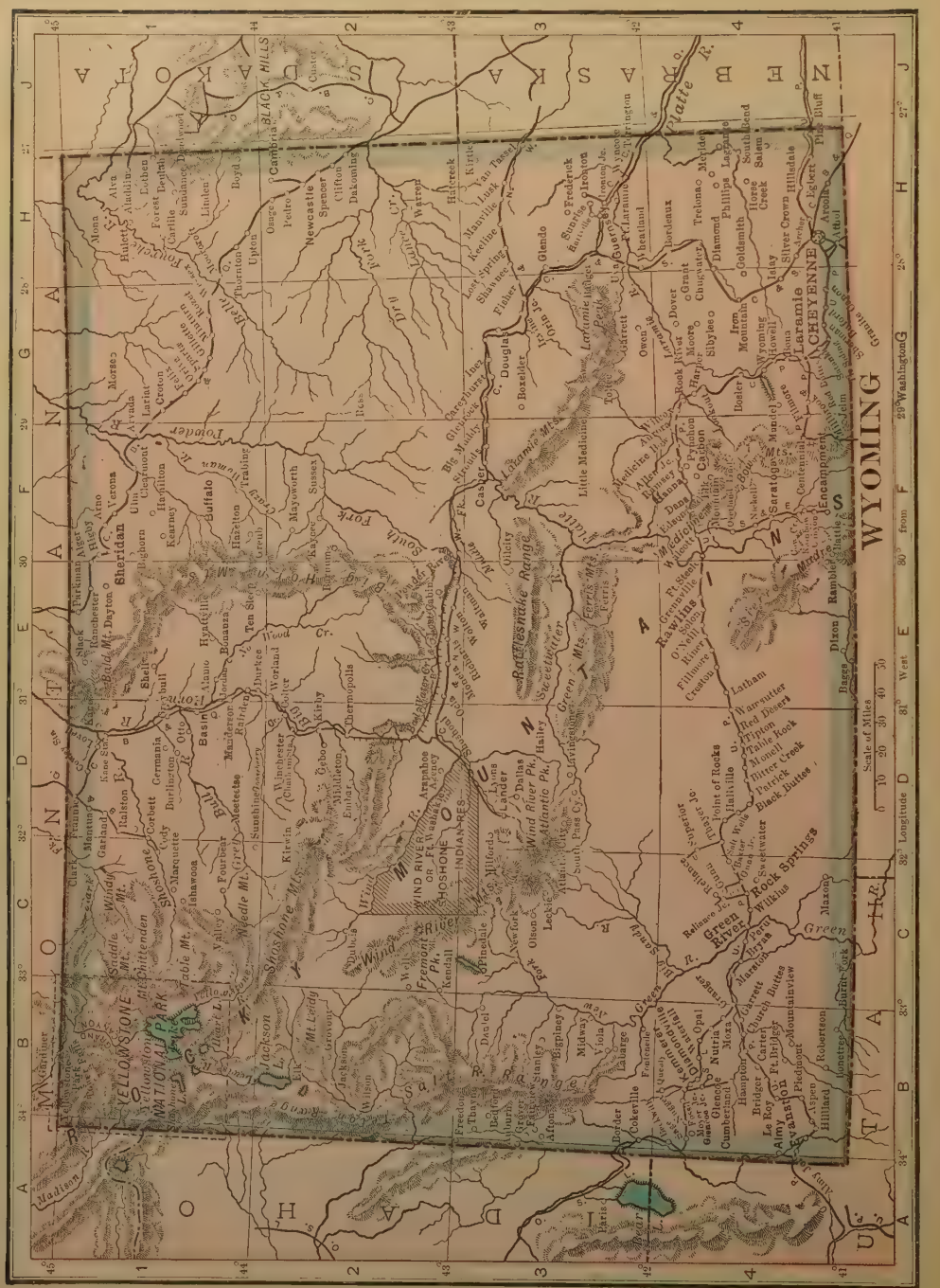

KANSAS
Scale of Miles
0 10 20 30 40 50
Longitude West from Greenwich
102° A 101° B 100° C 99° D 98° E 97° F 96° G 95° H
Imperial
Holdrege
Hastings
Genoa
Crete
Burlington Jo.
McCook
Republican
Cedar Bluffs
Bluehill
Orleans
Red Cloud
Blue
Beatrice
Nebraska City
Hebron
Fairbury
Tecumseh
Republican
Blakeman
Atwood
Oberlin
Norcatur
Norton
Long Id.
Smith Center
Lebanon
Esbon
Courtland
Scandia
Belleville
Mahaska
Waterville
Oketo
Hiawatha
Robinson
Sappa
Alma
Wamego
Manhattan
Horton
Goodland
Brewster
Colby
Hoxie
Morland
Webster
Stockton
Kirwin
Rockport
Alton
Osborne
Tipton
Covert
Delphos
Minneapolis
Concordia
Aurora
Glasco
Miltonvale
Clifton
Clay Center
Wamego
Holton
Meriden
Topeka
Lawrence
Leavenworth
Kansas Cy.
Neville
Quinter
Gaylord
Downs
Cawker City
Solomon Rapids
Jewell
Scottsville
Lincoln
Beloit
Waldo
Barnard
Lucas
Sylvan Grove
Wakefield
Manchester
Ft. Riley
Wamego
Junction Cy.
Alma
Eskridge
Keene
Carbondale
Overbrook
Baldwin
Ottawa
Osawatomie
Paola
Louisburg
Lecompton
Lawrence
Oskaloosa
Valley Falls
Meriden
Topeka
Arvonia
Atchison
Leavenworth
Kansas Cy.
Monument
Oakley
Grinnell
Quinter
Collyer
Wakeeney
Saline R.
Russell
Catherine
Walker
Dunkleberg
Durrance
Wilson
Ellsworth
Brookville
Salina
Gypsum
Woodbine
Skiddy
White Cy.
Harveyville
Wilmington
Williamsburg
Greeley
Lane
Garnett
Wallace
Sharon Springs
Wallace
Russell Spgs.
Gove
Ogallah
Ellis
Hays
Hawley
Hall
Ellsworth
Lincoln
Abilene
Chapman
Council Grove
Burlingame
Pomona
Edgerton
Gardner
Olathe
Stockholm
Kepple
Carwood
Farnsworth
Shields
Smoky Hill R.
Sticknoy
Lorraine
Carlton
Gypsum
Lindsborg
Durham
Tampa
Hope
Lehigh
Hillsboro
Elmdale
Marion
Florence
Peabody
Matfield Green
Madison
Neosho Falls
Yates Center
Humboldt
Iola
Chanute
Ft. Scott
Manning
Ransom
Brownell
McCracken
Laprairie
Claflin
Ellinwood
Great Bend
Galatea
Canton
McPherson
Lyons
Emporia
Americus
Osage Cy.
Dunlap
Allen
Olpe
Burlington
Waverly
Garnett
Scranton
Selkirk
Horace
Trilligo
Scott
Lecti
Ness City
Beeler
Bazine
Nekoma
Rush
Shafter
Albert
Pawnee Rock
Greenleaf
Hillsboro
Lincolnville
Lehigh
Canton
Marion
Cottonwood Falls
Strong
Hartford
Waverly
Westphalia
Leroy
Colony
Pleasanton
Federal
Conquest
Kearney
Knauston
Coolidge
Sycamore
Kendall
Deerfield
Lakin
Eminence
McCune
Friend
Tennis
Gillespie
Garden City
Ravanna
Jetmore
Hanson
Burdette
Rozel
Larned
Arkansas R.
Seward
Hudson
Sterling
Nickerson
Hutchinson
Garfield
Holbrook
St. John
Stafford
Sylvia
Arlington
Mound Ridge
Burton
Sedgwick
Valley Ctr.
Newton
Whitewater
Hamilton
Eldorado
Eureka
Yates Center
Iola
Humboldt
Chanute
Ft. Scott
Prescott
Fulton
Hartland
Fletcher
Edwin
Shockey
Johnson
Ulysses
Ingalls
Cimarron
Arkansas R.
Spearville
Wright
Ft. Dodge
Dodge Cy.
Greensburg
Haviland
Preston
Pratt
Pretty Prairie
Mount Hope
Colwich
Goddard
Wichita
Augusta
Derby
Leon
Beaumont
Coyville
Toronto
Buffalo
Altoona
Thayer
Galesburg
Parsons
Pittsburg
Arcadia
Colusa
Santa Fe
Ensign
Montezuma
Carmen
Wilburn
Ford
Cunningham
Kingman
Cheney
Clearwater
Latham
Douglass
Atlanta
Severy
Fairview
Howard
Moline
Fredonia
Neodesha
Independence
Coffeyville
Cherryvale
Roanoke
Zigurville
Touca
Taw
Crooked R.
Minneola
Belvidere
Coats
Rago
Norwich
Belle Plaine
Udall
Burden
Grenola
Elgin
Longton
Elk City
Montana
Scammon
Richfield
Woodsdale
Springfield
Fowler
Wilmore
Coldwater
Lake City
Harper
Attica
Argonia
Conway Springs
Oxford
Dexter
Cedarvale
Sedan
Caney
Cimarron
Zella
Plains
Meade
Ashland
Medicine Lodge
Hardtner
Crisfield
Anthony
Wellington
Winfield
Arkansas City
Hugoton
Arkalon
Protection
Kiowa
Caldwell
Milan
Belle Plaine
Point Rocks
Liberal
Englewood
Cimarron R.
Bluff City
S. Haven
Chautauqua
Sedan
Coffeyville
Cherryvale
Dearing
Elgin
Independence
Cimarron R.
Alva
Blackwell
Ponca
Arkansas R.
Fork of Arkansas R.
Nelagoney
Vinita
Grand R.
Miami
Empire Cy.
Galena
Carthage
Joplin
Oklahoma
Enid
Osage
Claremore
Longitude West from Greenwich
102° A 101° B 100° C 99° D 98° E 97° F 96° G 95° H


NEBRASKA
Scale of Miles
0 10 20 40 60 80
SOUTH DAKOTA
IOWA
KANSAS
COLORADO
WYOMING
MINNESOTA
MISSOURI
Longitude 100° West from 96° Greenwich
LINCOLN
Omaha
Grand Island
Hastings
Kearney
North Platte
McCook
Fremont
Nebraska City
Beatrice
Falls City
Tecumseh
York
Central City
Columbus
Norfolk
Wayne
Alliance
Chadron
Scottsbluff
Sidney
Ogallala
Valentine
Broken Bow
Ainsworth
Atkinson
O'Neill
Bloomfield
Yankton
Sioux City
Sioux Falls
Worthington
Sibley
Spencer
Cherokee
Correctionville
Denison
Tabor
Red Oak
Shenandoah
Clarinda
Creston
Corning
Maryville
St. Joseph
Atchison
Leavenworth
Lawrence
Topeka
Manhattan
Holton
Belleville
Concordia
Clyde
Clay Center
Hastings
Red Cloud
Superior
Franklin
Bloomington
Republican City
Oxford
Indianola
Culbertson
Stratton
Trenton
Benkelman
Imperial
Chase
Champion
Wauneta
Lamar
Holdrege
Axtell
Minden
Loomis
Elwood
Gothenburg
Lexington
Cozad
Elsie
Dickens
Sutherland
Ogallala
Paxton
Roscoe
Brule
Big Springs
Julesburg
Sterling
Wray
Yuma
Haigler
Culbertson
Benkelman
Cambridge
Arapahoe
Wilcox
Ragan
Orleans
Alma
Naponee
Bartley
Cowles
Danbury
Lebanon
Willsville
Stockville
Curtis
Moorefield
Maywood
Farnam
Eustis
Overton
Elm Creek
Shelton
Wood River
Gibbon
Kenesaw
Juniata
Harvard
Edgar
Fairfield
Sutton
Clay Center
Glenville
Deweese
Inland
Harvard
Ong
Davenport
Exeter
Milligan
Fairmont
Geneva
Fullerton
Genoa
Schuyler
Leigh
Howells
Dodge
Scribner
Hooper
Nickerson
Fremont
Arlington
Blair
Tekamah
Herman
Decatur
Lyons
Wisner
Pilger
Stanton
Beemer
Pender
Hoskins
Winside
Carroll
Randolph
Laurel
Concord
Allen
Jackson
Emerson
Hubbard
Dakota City
South Sioux City
Homer
Jackson
Newcastle
Hartington
Coleridge
Ponca
Niobrara
Verdigris
Creighton
Wausa
Osmond
Plainview
Page
Orchard
Elgin
Battle Creek
Madison
Norfolk
Meadow Grove
Hadar
Pierce
Foster
Oakdale
Clearwater
Ewing
Neligh
Inman
Stuart
Atkinson
Paddock
Saratoga
Cuba
Grand Rapids
Springview
Mills
Norden
Sparks
Britt
Ft. Niobrara
Valentine
Cody
Merriman
Hay Springs
Gordon
Rushville
Harrison
Crawford
Robinson
Andrews
Glen
Belmont
Antelope
Harlan
Bailey
Arabia
Winfield
Wood Lake
Kennedy
Newton
Chesterfield
Ainsworth
Brownlee
Midvale
Perch
Hammond
Stanford
Amelia
Duff
Elsmere
Cascade
Seneca
Thedford
Halsey
Loup River
Almeria
Taylor
Burwell
Ericson
Newman Grove
Albion
Lindsay
Cedar Rapids
Genoa
Columbus
Platte Center
Monroe
Humphrey
Madison
Battle Creek
Elgin
Petersburg
Bartlett


NORTH DAKOTA
Scale of Miles
0 10 20 30 40 50
SASKATCHEWAN
DOMINION
MINNESOTA
SOUTH DAKOTA
MONTANA
FORT BERTHOLD INDIAN RESERVATION
STANDING ROCK INDIAN RESERVATION
BISMARCK
Grand Forks
Valley City
Jamestown
Devils Lake
Minot
Dickinson
Williston
Longitude 101° West from 100° Greenwich
C.S. HAYMOND & CO., N.Y.

SOUTH DAKOTA
Scale of Miles
0 10 20 30 40 50 60
Size of type indicates relative importance of places.
101° Longitude West from Greenwich
NORTH DAKOTA
MINNESOTA
IOWA
NEBRASKA
MONTANA
WYOMING
STANDING ROCK INDIAN RESERVATION
CHEYENNE RIVER INDIAN RESERVATION
PINE RIDGE INDIAN RESERVATION
LOWER BRULE IND. RES.
Aberdeen
Watertown
Sioux Falls
Huron
Mitchell
Madison
Brookings
Redfield
Webster
Milbank
Sisseton
Groton
PIERRE
Rapid City
Deadwood
Sturgis
Spearfish
Belle Fourche
Hot Springs
Custer
Lead
Watertown
Yankton
Vermillion
Elk Point
Dell Rapids
Harrisburg
Canton
Parker
Scotland
Tyndall
Gregory
Winner
Chamberlain
Kimball
Platte
Wagner
Academy
Presho
Oacoma
Fort Pierre
Fort Meade
Hot Springs
Edgemont
Oelrichs
Smithwick
Kyle
Manderson
Pine Ridge
Porcupine
Gamble
Rosebud
Eagle Nest
Allen
Ardmore
Eckard
Chadron
Crawford
Hay Springs
Harrison
Hemingford
Niobrara
Longpine
O'Neill
Plainview
Creighton
Wayne
Norfolk
Yankton
Gayville
Meckling
Running Water
Hartington
Elkhorn
Laurel
Jefferson
Sioux City
Spink
Nora
Davis
Menno
Centerpoint
Hanson
Irene
Lesterville
Utica
Volin
Fairview
Delmont
Tripp
Geddes
Armour
Harrison
Hudson
Beresford
Alcester
Centerville
Lennox
Worthington
Sherman
Garretson
Colton
Montrose
Hartford
Humboldt
Trent
Egan
Flandreau
Elkton
Ward
Oldham
Carthage
Arlington
Esmond
Volga
Bruce
White
Bushnell
Toronto
Astoria
Clear Lake
Brandt
Castlewood
Hazel
Dempster
Bryant
Estelline
Lake Preston
Oakwood Lakes
Lake Norden
Lake Poinsett
Lake Albert
Lake Henry
Lake Madison
Lake Herman
Lake Campbell
Lake Hiddenwood
Lake Pocasse
Lake Byron
Lake Andes
Lake Andahl
Lake Traverse
Big Stone L.
Big Stone City
Browns Valley
Wilmot
Summit
Stockholm
Lafayette
Strandburg
Doland
Raymond
Garden City
Clark
Elrod
Vienna
Naples
Carpenter
Willow Lake
Winfred
Iroquois
Lake
Wolsey
Broadland
Bonilla
Hitchcock
Tulare
Helmick
Edwin Burdette
Afton
Highmore
Holabird
McCauley
Hawley
Ney
Roy
Onida
Kasper
Fairbank
Okobojo
Fort Bennette
Leslie
Marston
Shiloh
Whitewood
Sturgis
Fort Meade
Tilford
Elmsprings
Dalzell
Smithville
Hardingville
Manila
Hatter
Wendte
Boyine
Grindstone Butte
Nowlin
Phillip
Bad
White Clay Butte
Red Butte
Kennebec
Lyonville
Grosse
Glen
Fletcher
Loomis
Chamberlain
Pukwana
Red Lake
Eagle
Bijou Hills
Iona
Academy
Platte
Harrison
Hummer
Armour
Geddes
Delmont
Tripp
Wagner
Avon
Lake Andes
Wheeler
Whitewood
Starcher
Herrick
Bonesteel
Fairfax
Echo
Greenwood
Springfield
Tabor
Lake Andahl
Volin
Fairview
Utica
Lesterville
Irene
Hanson
Centerpoint
Menno
Davis
Parker
Hurley
Marion
Freeman
Salem

DOMINION OF CANADA
MONTANA
NORTH DAKOTA
WYOMING
SOUTH DAKOTA
Scale of Miles
0 10 20 40 60 80 100
Size of type indicates relative importance of places.
C. S. HAMMOND & CO., N.Y.
Long. from Green.
Missouri R.
Yellowstone R.
Milk R.
Marias R.
Teton R.
Sun River
Dearborn R.
Big Hole R.
Jefferson R.
Madison R.
Gallatin R.
Powder R.
Tongue R.
Bighorn R.
Little Bighorn R.
Rosebud R.
Musselshell R.
Judith R.
Smith R.
Shields R.
Boulder R.
Stillwater R.
Clarks Fork
Shoshone R.
Bull R.
Wind R.
Owl Cr.
Crow Cr.
Cheyenne R.
Belle Fourche R.
Little Missouri R.
Knife R.
Heart R.
Cannonball R.
Grand R.
Moreau R.
Cedar
Fall R.
Box Elder
Big Sandy
Beaver Cr.
Porcupine Cr.
Poplar R.
Redwater R.
Big Dry Cr.
Little Dry Cr.
Prairie Dog Cr.
Willow Cr.
Sage Cr.
Pryor Mts.
Big Horn Mts.
Wolf Mts.
Bull Mts.
Crazy Mts.
Little Belt Mts.
Big Belt Mts.
Highwood Mts.
Sweetgrass Hills
Bear Paw Mts.
Little Rocky Mts.
Judith Mts.
Snowy Mts.
Pryor Mts.
Pine Ridge
Wolf Mts.
Cedar Mts.
Sioux Pass
Bozeman Pass
Mullan Pass
Lolo Pass
Marias Pass
Roger Pass
Flathead L.
Swan L.
Lake Pend Oreille
Kootenai R.
Yellowstone Lake
Fort Peck Res.
Tiber Res.
Nelson Res.
Canyon Ferry Res.
Hebgen L.
Madison Res.
Gibson Res.
Sun River Res.
Lake Elwell
Bynum Res.
Nilan Res.
Lake Koocanusa
Lake Mary Ronan
Georgetown L.
Rogers Pass
Chief Mountain
Chief Joseph Pass
Big Snowy Mts.
Little Snowy Mts.
Big Horn Canyon
Pryor Gap
Bighorn Canyon
Crow Agency
Lame Deer
Ashland
Kirby
Decker
Sheridan
Arvada
Conc
Aladdin
Hulett
Alzada
Broadus
Powderville
Ekalaka
Baker
Miles City
Glendive
Wibaux
Newlon
Plentywood
Scobey
Culbertson
Westby
Whitetail
Opheim
Dagmar
Nashua
Oswego
Wolf Point
Poplar
Brockton
Froid
Culbertson
Fairview
Sidney
Lambert
Savage
Fallon
Terry
Prairie Dog Cr.
Lacomb
Shirley
Westmore
Knowlton
Mirpah
Teeden
Hathaway
Etna
Hockett
Garland
Sabra
Brandenberg
Stacey
Ashland
Kingsley
Selway
Otter
Broadus
Moorhead
Graham
Fivemile
Ridge
Alzada
Capitol
Ericson
Midland
Powderville
Ekalaka
Dodge
Tongue R.
Powder R.
Rosebud R.
Yellowstone R.
Bighorn R.
Little Bighorn R.


WYOMING
MONTANA
NEBRASKA
SOUTH DAKOTA
UTAH
COLORADO
YELLOWSTONE NATIONAL PARK
WIND RIVER INDIAN RES.
SHOSHONE
ARAPAHOE
Big Horn Mts.
Laramie Mts.
Rattlesnake Range
Wind River Mts.
Salt River Range
Teton Range
Owl Creek Mts.
Green River
Platte R.
Yellowstone R.
Snake R.
Bighorn R.
Powder R.
Tongue R.
Wind R.
Little Missouri R.
Cheyenne
Laramie
Rock Springs
Green River
Lander
Riverton
Sheridan
Buffalo
Casper
Douglas
Wheatland
Torrington
Scale of Miles
Longitude
West from Washington

IDAHO
Scale of Miles
0 10 20 40 60
Size of type indicates relative importance of places.
Boise
Pocatello
Idaho Falls
Lewiston
Moscow
Coeur d'Alene
Wallace
Grangeville
Salmon
Hailey
Blackfoot
Rexburg
Montpelier
Malad City
Weiser
Nampa
Caldwell
Mountain Home
Twin Falls
Burley
Rupert
Shoshone
Wendell
Gooding
Jerome
Preston
Franklin
Soda Springs
Lava Hot Springs
Grace
Thatcher
Arimo
Downey
Oxford
Samaria
Holbrook
Cherry Creek
Weston
Clifton
Dayton
Whitney
Oneida
Arbon
Malta
Albion
Conant
Basin
Milner
Marion
Oakley
Rogerson
Hollister
Rockerfeek
Roseworth
Threecreek
Riddle
Owyhee
Wickahoney
Bruneau
Grandview
Delamar
Jordan Valley
Mt. Winthrop
Dairy
Mahogany
Lowry
Orchard
Murphy
Oreana
Garnet
Reverse
Glenns Ferry
Hot Springs
Hagerman
Austin
Bliss
Bluelakes
Snake R.
Payette
Fruitland
Parma
Nyssa
Ontario
Vale
Brogan
Olds Ferry
Huntington
Baker
Sumpter
Cornucopia
Granite
Prairie City
Canyon City
Dixie
Florence
Pollock
Iron Springs
Warren
Knott
Homestead
Landore
Caprum
Bear
Meadows
Roosevelt
Lardo
Council
Roseberry
Salubria
Cambridge
Barton
Concrete
Crane
Wilburton
Rebecca
Ola
Pinehurst
Pioneerville
Centerville
Idaho City
Atlanta
Featherville
Pine
Emmett
Pearl
Middleton
Meridian
Barber
Maxfield
Owyhee
Wilson
Rockville
Silver City
Delamar
Crawford
Alpha
Cove
Horn
Custer
Bayhorse
Robinson
Stanley
Clayton
Pierson
Dickey
Clyde
Kaufman
Reno
Dubois
Spencer
Nebolia
Highbridge
Small
Kilgore
Rice
Marysville
Lewisville
Ashton
Chester
Teton
Hadem
Wilford
Squirrel
Elgin
Independence
Menan
Roberts
Lyman
Rigby
Victor
Irwin
Lyon
Prospect
Ammon
Shelley
Presto
Basalt
Firth Sta.
Tabor
Moreland
Pingree
Ririe
Tilden
Heiman
Grant
Gray
Aberdeen
American Falls
Chesterfield
Banock
Indian Res.
Robin
Dempsey
Lund
Cove
Lake
Georgetown
Bennington
Montpelier
Geneva
Paris
Bloomington
Dingle
Star
Bear Lake
St. Charles
Fish Haven
Whites
Nat.
Stone
Woodruff
Randolph
Laketown
Garden City
Fish Haven
Ovid
Sage Jct.
Ora
Ucon
Idaho Falls
Iona
Sunnyside
Goshen
Ririe
Lorenzo
Rigby
Menan
Lyman
Teton
Hadem
Wilford
Squirrel
Elgin
Rexburg

UTAH
Scale of Miles
0 10 20 40 60
WYOMING
ARIZONA
NEVADA
IDAHO
COLORADO
Longitude 112° West from Greenwich 111°
Montpelier
North L.
Garner
Malad City
Oakley
Bridge
Preston
Bear L.
Lewiston
Richmond
Newton
Smithfield
Hyde Park
Logan
Randolph
Hyrum
Paradise
Avon
Woodruff
Cumberland
Green River
Evanston
Cache Junction
Brigham
Corinne
Bear River Bay
Harrisville
Ogden
Huntsville
Wasatch
Cattle Rock
Pilot Peak Range
Stronghold
Syracuse
Clearfield
Kaysville
Farmington
Centerville
Bountiful
Hooperville
Wanship
Rockport
Oakley
Kamas
Park City
Heber
Charleston
Midway
Wallsburg
Provo City
Springville
Spanish Fork
Payson
Eureka
Mercur
Sunshine
Fairfield
Lehi
Saratoga
Thistle
Colton
Indianola
Castilla
Tucker
Scofield
Castlegate
Helper
Price
Sunnyside
Wellington
Mt. Pleasant
Spring City
Moroni
Wales
Chester
Ephraim
Manti
Huntington
Orangeville
Castledale
Cleveland
Lawrence
Woodside
Cedar
Mounds
Descrtlake
Fairview
Nephi
Fountain Green
Levan
Juab
Mills
Oak City
Leamington P.O.
Abraham
Hinkley
Oasis
Deseret
Scipio
Gunnison
Centerville
Clearlake
Holden
Redmond
Axtel
Sterling
Mayfield
Ferron
Emery
Salina
Aurora
Sigurd
Meadow
Fillmore
Kanosh
Richfield
Glenwood
Annabella
Joseph
Monroe
Sevier
Kingston
Circleville
Junction
Greenville
Minersville
Beaver
Milford
Black Rock
Garrison
Ibex
Burbank
Newhouse
Frisco
Thermo
Nada
Lund
Escalante
Sahara
Paragonah
Parowan
Summit
Modena
Uvada Sta.
Enoch
Cedar City
Enterprise
Hebron
Pinto
Kanarraville
New Harmony
Pine Valley
Gunlock
Leeds
Toquerville
Orderville
Glendale
Mt. Carmel
Springdale
Virgin
Rockville
St. George
Washington
Santa Clara
Kanab
Johnson
Panguitch
Orton
Circleville
Hatch
Tropic
Canonville
Henrieville
Ranch
Skumpah
Panaca
Escalante
Boulder
Grover
Torrey
Teasdale
Fremont
Lyman
Loa
Marysvale
Junction
Thurber
Koosharem
Burrville
Fremont
Giles
Hanksville
Basal
Castleton
Moab
Basin
Thompson
Green River
Cisco
Elgin
Westwater
Roan or Book Cliffs
Red Plateau
Woodside
Dome Plateau
Red Dome
Orange Cliffs
Grand
Bluff
Mexican Mt.
Abajo Mts.
Abajo Pk.
Mt. Linnaeus
Monticello
Orejas del Oso
Mt. Ellsworth
Mt. Hillers
Mt. Ellen
The Temple
Carlisle
Henry Mts.
Aquarius Plateau
Mt. Dutton
Kaiparowits Plateau
Escalante
Tropic
Henrieville
Canonville
Ranch
Skumpah
Panaca
Johnson
Cottonwood Canyon
Buckskin Plateau
Glen Canyon
Navajo Mt.
Monument Valley
NAVAJO INDIAN RESERVATION
Colorado R.
San Juan R.
Comb Wash
Bluff
Aneth
Mt. Corson
Manila
Bridgeport
Wilson Pk.
Mt. Agassiz
Uinta Mts.
Uinta
Duchesne
Myton
Vernal
Jensen
Fort Duchesne
Ouray
Cathedral Butte
Cypress Hills
Ute Indian RESERVATION
Ute Indian RESERVATION
Uintah
Ouray
Ute Indian RESERVATION
Ute Indian RESERVATION
Ute Indian RESERVATION

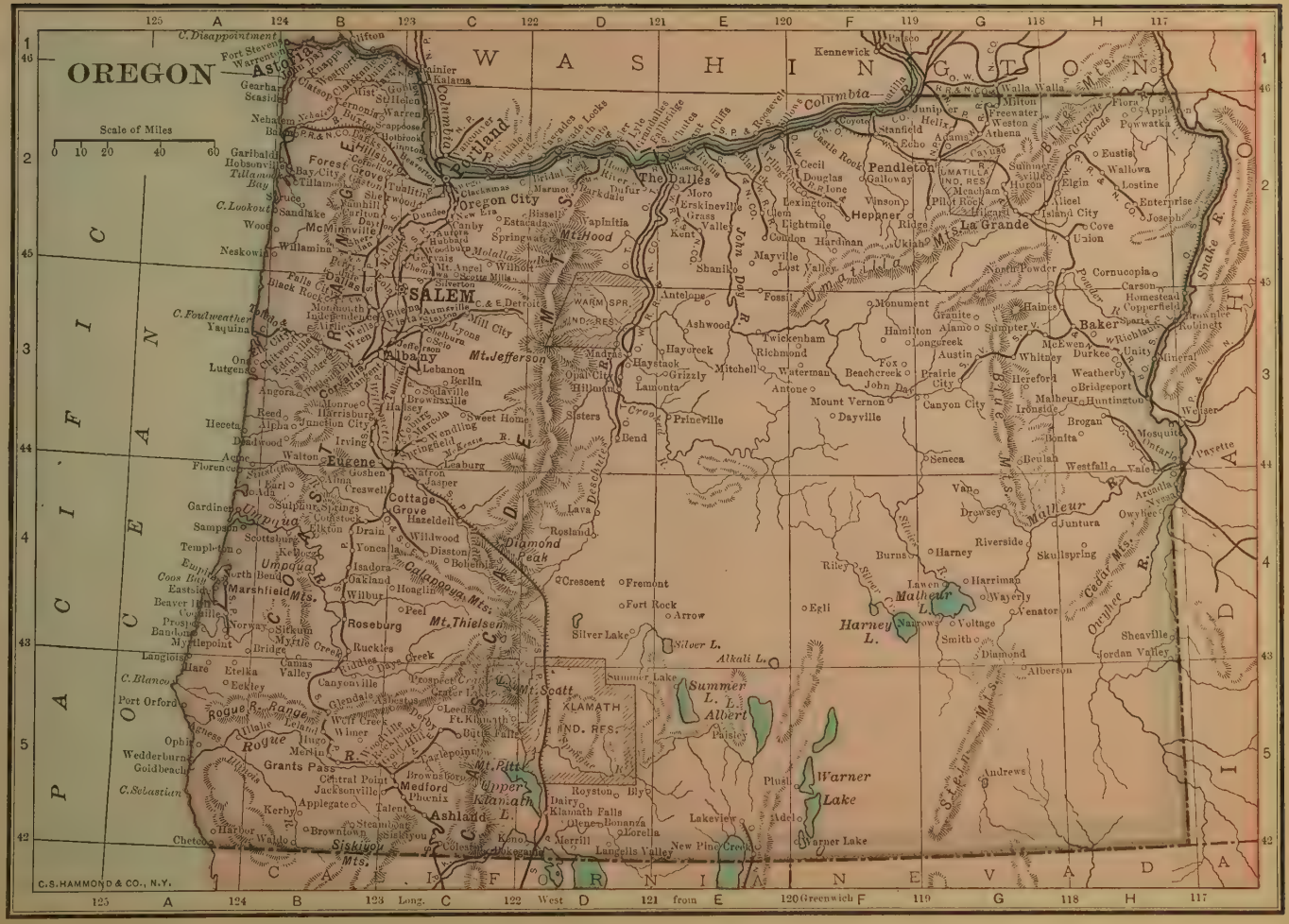
COLORADO
DENVER
Colorado Spgs.
Pueblo
Trinidad
Boulder
Leadville
Aspen
Cripple Creek
Grand Junction
Durango
Glenwood Spgs.
Walsenburg
Lamar
Springfield
Sterling
Julesburg
Holyoke
Akron
Wray
Yuma
Burlington
Limon
Hugo
Kit Carson
Eads
Las Animas
Boone
Rocky Ford
La Junta
Trinidad
Raton
Longitude West from Greenwich
Scale of Miles

NEW MEXICO
COLORADO
UTAH
ARIZONA
TEXAS
MEXICO
SANTA FE
Albuquerque
Las Vegas
Roswell
Carlsbad
Alamogordo
Lincoln
Socorro
Gallup
Deming
Silver City
Raton
Taos
Mora
Portales
Clovis
Tucumcari
Lordsburg
Hobbs
Artesia
Scale of Miles
0 10 20 30 40 50 60 70 80
109° A 108° B 107° C 106° D 105° E 104° F 103°
Long. West from Green.

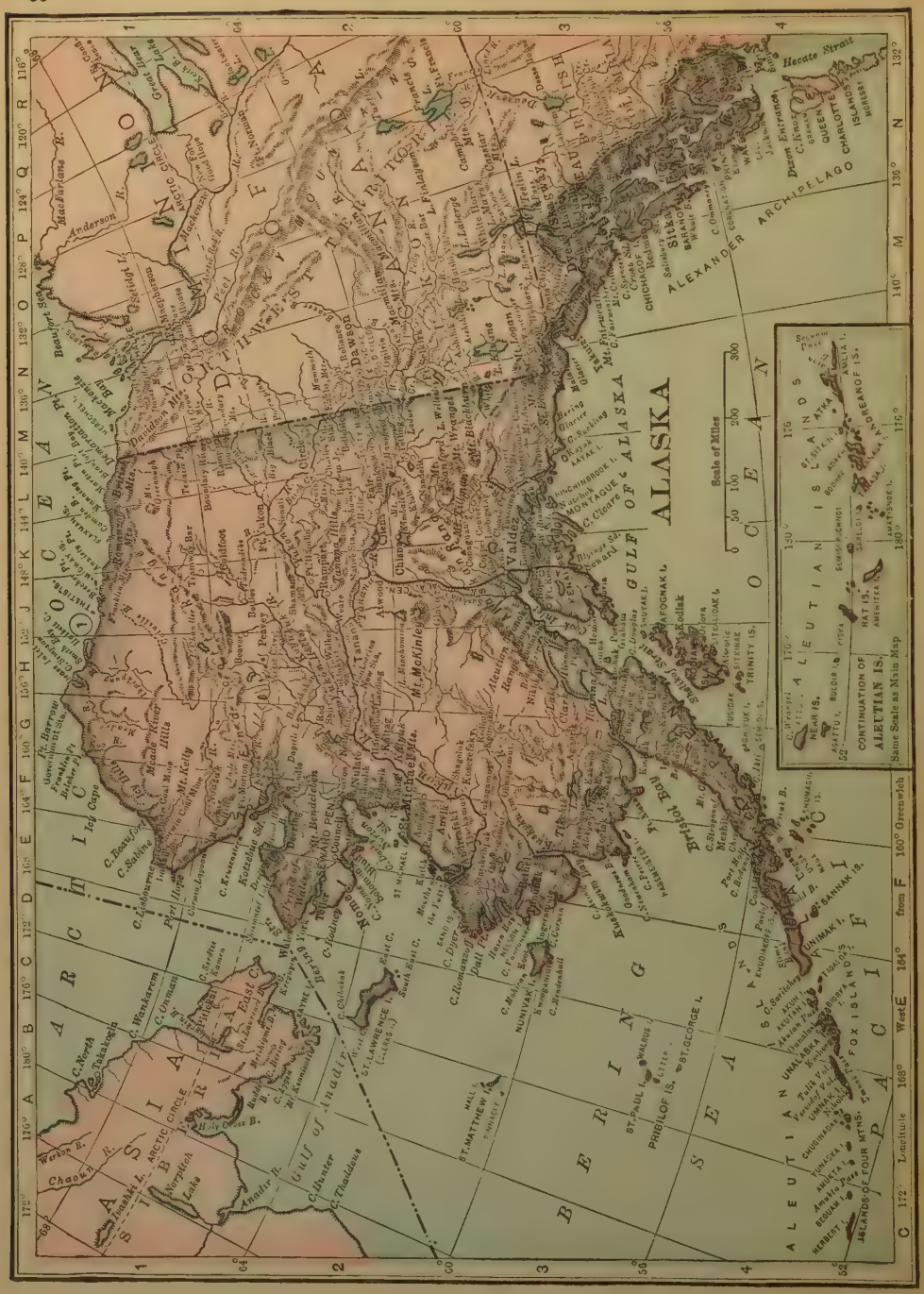
A 114° B 113° Longitude West from Greenwich C 112° D 111° E 110° F

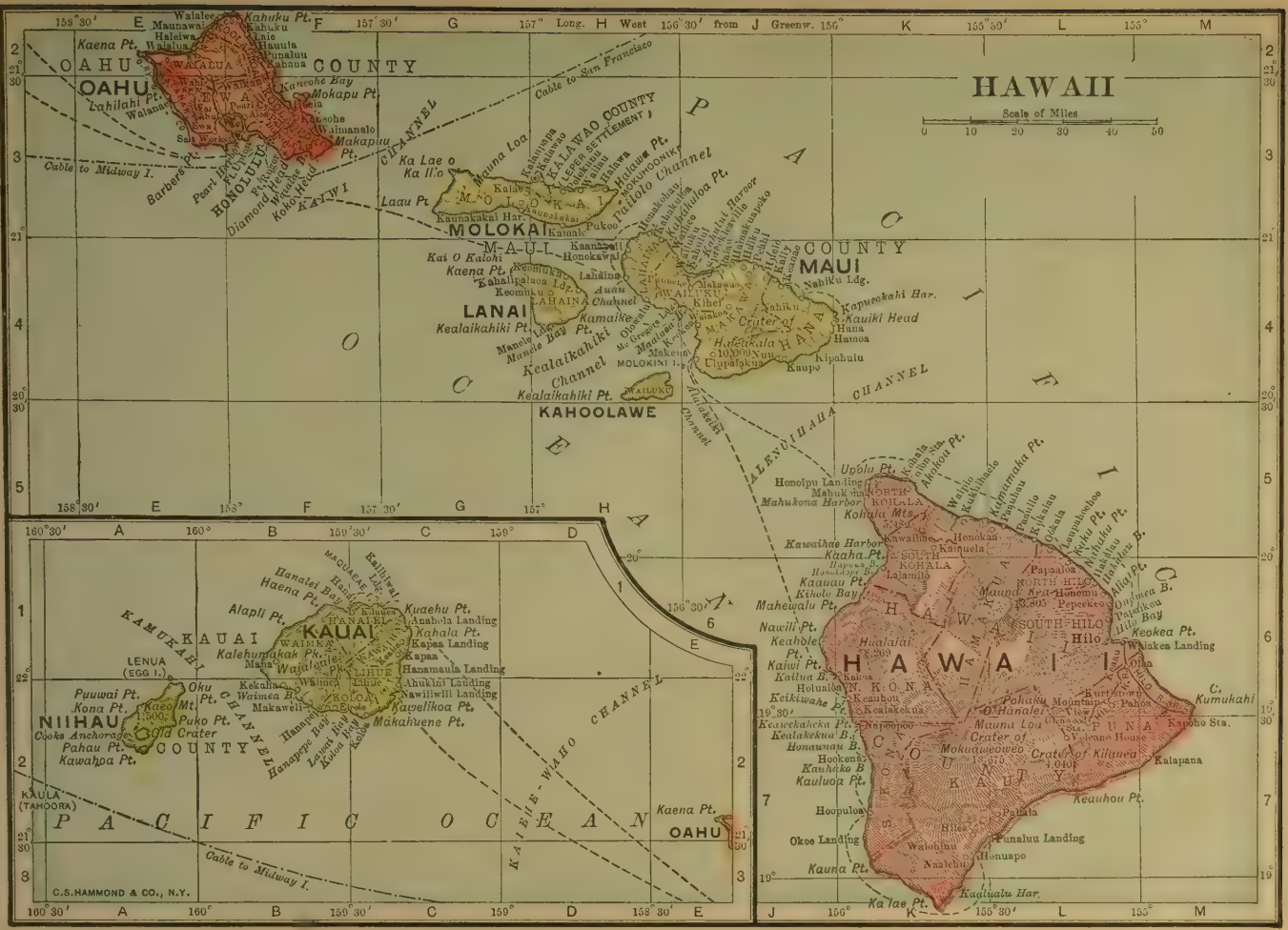
PART OF SOUTHEASTERN CALIFORNIA
Same Scale as Main Map
CALIFORNIA
Scale of Miles
0 10 20 40 60 80 100 120 140
Size of type indicates relative importance of places.
C.S.HAMMOND & CO., N.Y.
Longitude West from Greenwich
San Francisco
Oakland
SACRAMENTO
Stockton
San Jose
Fresno
Santa Cruz
Monterey Bay
Pt. Sur
C. San Martin
Pt. Conception
Santa Barbara Channel
SAN MIGUEL I.
SANTA ROSA I.
SANTA CRUZ I.
SANTA BARBARA I.
SAN NICOLAS I.
SANTA CATALINA I.
SAN CLEMENTE I.
Outer Santa Barbara Channel
Gulf of Santa Catalina
Los Angeles
San Diego
Coronado
Tijuana Bay
CORONADOS IS.
MEXICO
Death Valley
Owens L.
Mono L.
Tulare L.
Salton Sea
Colorado R.
Mt. Shasta
Mt. Lassen
Mt. Dana
Mt. Lyell
Mt. Whitney
Mt. Tyndall
Mt. Williamson
San Bernardino Mts.
San Jacinto Mts.
Santa Rosa Mts.
Santa Ana Mts.
Coast Ranges
Sierra Nevada
Cascade Range

NEVADA
Scale of Miles
0 10 20 30 40 50 60 70 80
Railroads
Railroads Projected
State Capital
Indian Reservations
Forest Reservations
Size of type indicates relative importance of places
C.S.HAMMOND & CO., N.Y.
OREGON
IDAHO
CALIFORNIA
UTAH
ARIZONA
Lovelocks
Winnemucca
Elko
Ely
Eureka
Austin
Tonopah
Goldfield
Beatty
Rhyolite
Bullfrog
Las Vegas
Carson City
Virginia City
Reno
Pioche
Caliente
Searles
Borax Flats
Crackerjack
Death Valley
Owens Lake
Mono Lake
Lake Tahoe
Yosemite
Shoshone
Tecopa Sta.
Dumont
Valjean
Riggs
Silver Lake
Berry
Soda Lake
Cima
Ames
Ekoro
Baker
Crucero
Afton
Field
Kingman
Mohave Jc.
McConnico
Chloride
Quartette
Searchlight
Newberry
Nelson
Roach
Crescent
Sutor
Jean
Eldorado Canyon
White Hills
Goodsprings
Sandy
Yellow Pine
Bard
Arden
Las Vegas
Spring Mts.
Pahrump
Stewart Valley
Corn Creek
Owens
Keeler
Lone Pine
Independence
Citrus
Thebe
Millwood
Dunlap
Reedley
Hammond
Mineral King
Three Rivers
Exeter
Lindsay
Tulare
Visalia
Hanford
Armona
Fresno
Clovis
Pollasky
Madera
Raymond
Northfork
Shaver
Alvord
Roundvalley
Oasis
Laws
Poleta
Benton
Benton Sta
Sequoia
El Portal
Merced
Lundy
Mono Lake
Crater
Bodie
Bridgeport
Bellville
Masonic
Douglas
Wasuk
Fletcher
Topaz
Wellington
Coleville
Markleeville
Woodfords
Hawthorne
Walker L.
Walker R.
Yerington
Wabuska
Schurz
Mason
Churchill
Fallon
Stillwater
Victor
Wonder
Carson L.
Fairview
Eagleville
Pilonolite
Dulutti
Millas
Berlin
Paradise
Atwood
Goldlike
Kirkland
Luning
New Boston
Mina
Klondike
Sodaville
Ruhenstein
Adelaide
Golden
Cloverdo
Manhattan
Tybo
Hotorea
Clifford
Stone Cabin
Belleheln
Reveille
Hannapah
Golden Arrow
Silverton
Diamondfield
Columbia
Montezuma
Gold Mt.
Bonnie Claire
Coyote Holes
Fountain Ranch
Trapmans Camp
Rawich
Palmetto
Lida
Gold Mt.
Monte Cristo
Black Mts.
Old Camp Thorp
Gold Centre
Amargosa R.
Ashmeadow
Johnnie
Darwin
Wild Rose
Ballarat
Greenwater
Millspaugh
Olancha
Haiwee
Inyo
Whitney
Owens Lake
Skidoo
Emigrant Springs
Darwin
Freemap
Johannesburg
Atolia
Valley
Dry L.
Dry Lake
Garnet
Crystal
Byron
Logan
Thomas
Gold Butte
Rioville
Virgin R.
Mesquite
Bunkerville
Moapa R.
Overton
Logandale
Monona
Guelph
Arrow Canyon
Gass Peak
Arrowhead Mts.
Charleston Pk.
Mt. Trish
Delamar
Alamo
Elgin
Kyle
Panaca
Eccles
Kershaw
Stein
Canal
Caselton
Lund
Preston
Duckwater
Currant
Whiterock
Geyser
Patterson
Sunnyside
Newlands
Fairview
Fallon
Frenchman
Lahontan
Carson R.
Humboldt R.
Humboldt L.
Truckee R.
Pyramid L.
Winnemucca L.
Mud L.
Toulon L.
Rye Patch
Rabbit Hole
Granite Pt.
Brown's
Mirman
Ocala
Parran
Marsala
Sink
Boyd
Berlese
Mt. Grant
Mt. Airy
Dry L.
Alkali Flat
Potts
Millett
Kingston
Austin
Ruby Hill
Prospect
Hamilton
Seligman
Cleveland
Osceola
Snake R.
Blackrock
Range
Shoshone
Barnes
Whiterock
Patterson
Pk.
Sawtooth
Pk.
Indian Pk.
Needle Ra.
Garrison
Barbarat
Pioche
Highland
Range


OREGON
WASHINGTON
IDAHO
NEVADA
CALIFORNIA
PACIFIC
Scale of Miles
0 10 20 40 60
Columbia
Willamette
Snake R.
Owyhee R.
Malheur R.
Deschutes R.
John Day R.
Umpqua R.
Rogue R.
Klamath
Harney L.
Malheur L.
Summer L.
Albert
Warner Lake
Mt. Jefferson
Mt. Hood
Mt. Scott
Mt. Thielsen
Diamond Peak
Mt. Pitt
Siskiyou Mts.
Cascade Mts.
Coast Range
Blue Mts.
Wallowa Mts.
Steens Mts.
Cedar Mts.
Owyhee Mts.
Portland
Astoria
Salem
Albany
Eugene
Oregon City
McMinnville
Cottage Grove
Roseburg
Grants Pass
Medford
Ashland
The Dalles
Pendleton
La Grande
Baker
Ontario
Vale
Burns
Harney
Lakeview
Klamath Falls
Silver Lake
Fort Rock
Crescent
Prineville
Sisters
Bend
Madras
Warm Springs Ind. Res.
Umatilla Ind. Res.
Klamath Ind. Res.
Summer Lake
Alkali L.
Silver L.
Goose L.
Pluvial
Lake
Andrews
Jordan Valley
Owyhee
Vale
Ontario
Nyssa
Weiser
Payette
Boise
Caldwell
Nampa
Meridian
Emmett
Parma
Middleton
Homedale
Marsing
Kuna
Melba
Notus
Sunny Slope
Wilder
Greenleaf
Star
Eagle
Gem
Hailey
Ketchum
Sun Valley
Bellevue
Carey
Picabo
Gannett
Shoshone
Dietrich
Richfield
Gooding
Wendell
Hagerman
Bliss
Twin Falls
Filer
Rupert
Declo
Albion
Burley
Malta
Oakley
Kenyon
Heyburn
Rupert
Minidoka
Paul
Rupert
Rupert
Rupert

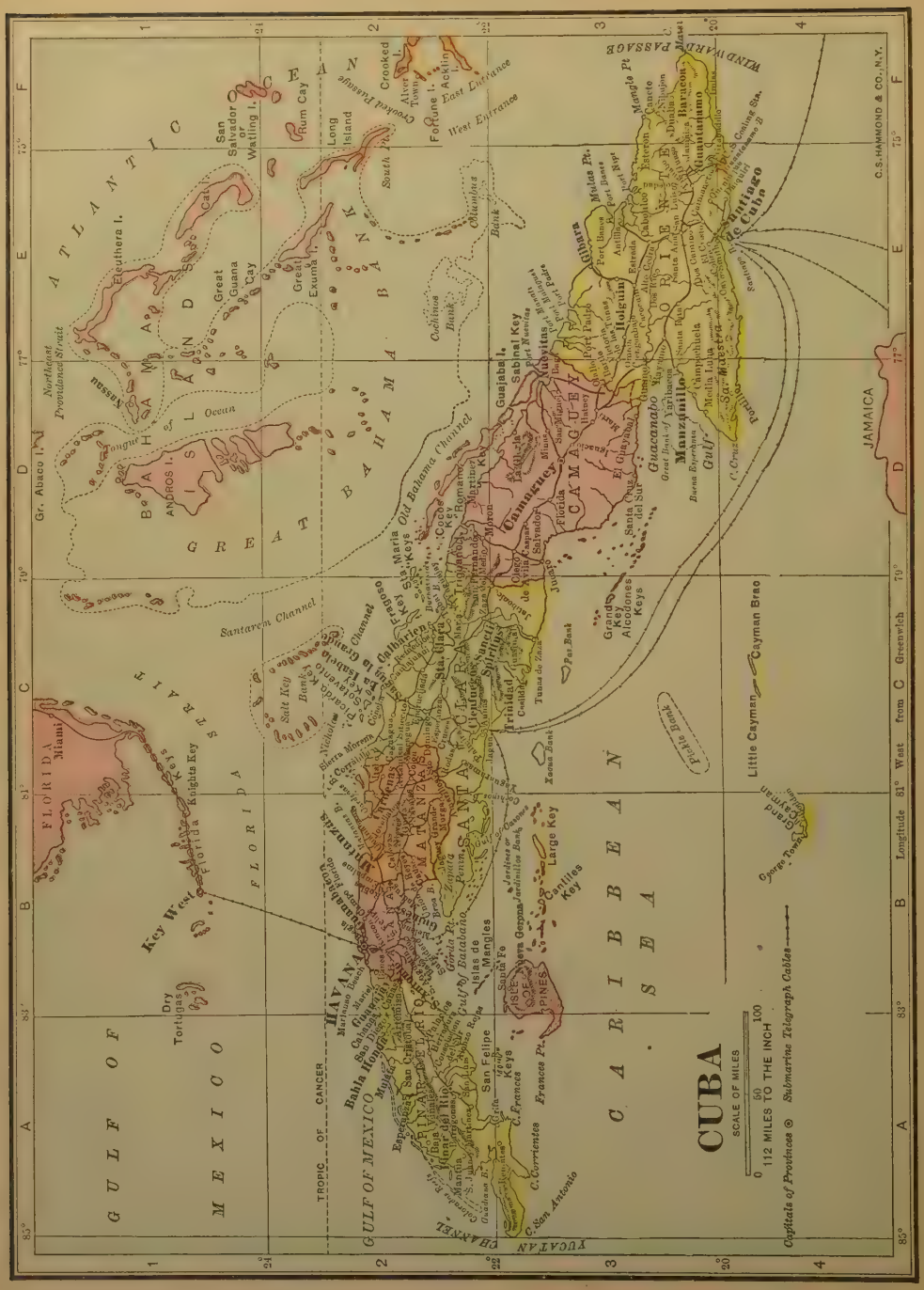
WASHINGTON
Scale of Miles
0 10 20 40 60
Size of type indicates relative importance of places.
Strait of Juan de Fuca
Strait of Georgia
INTERNATIONAL BOUNDARY
MAKAH IND. RES.
QUINAULT INDIAN RES.
COLVILLE INDIAN RESERVATION
SPOKANE INDIAN RES.
YAKIMA INDIAN RESERVATION
Seattle
Tacoma
OLYMPIA
Everett
Bellingham
Spokane
Walla Walla
North Yakima
Roslyn
Ellensburg
Wenatchee
Moses L.
Alkali L.
Omak L.
Chopaka Mt.
Wind Pass
Mt. Hozomeen
Mt. Shuksan
Mt. Baker
Baker L.
Boston Pk.
Dome Pk.
Glacier Pk.
Indian Pass
Baldy Mt.
Lake Chelan
Table Mt.
Mt. Stuart
Cowlitz Pass
Mt. Rainier
Mt. Adams
Mt. St. Helens
Mt. Olympus
Mt. Ellinor
Fitzhenry Pk.
Mt. Angeles
Wind River
Yakima Ridge
Rattlesnake Hills
White Bluffs
Saddle Mts.
Blue Mts.
Table Mts.
Moses L.
Columbia R.
Snake R.
Yakima R.
Chehalis R.
Cowlitz R.
Willamette R.
Skagit R.
Nooksack R.
Stillaguamish R.
Snoqualmie R.
Green R.
Puyallup R.
Nisqually R.
Skokomish R.
Hoh R.
Quillayute R.
Quinault R.
Humptulips R.
Wynoochee R.
Satsop R.
Wishkah R.
Hoquiam R.
Chehalis R.
Willapa R.
Naselle R.
Grays Harbor
Willapa Harbor
Juan de Fuca Strait
Puget Sound
Hood Canal
Lake Washington
Lake Sammamish
Lake Whatcom
Lake Samish
Lake Cushman
Lake Quinault
Lake Crescent
Lake Sutherland
Lake Ozette
Lake Pleasant
Lake Quinault
Lake Wenatchee
Lake Roosevelt
Lake Chelan
Lake Osoyoos
Lake Pend Oreille
Lake Coeur d'Alene
Lake Chelan
Lake Roosevelt
Lake Pend Oreille
Lake Coeur d'Alene
Lake Osoyoos

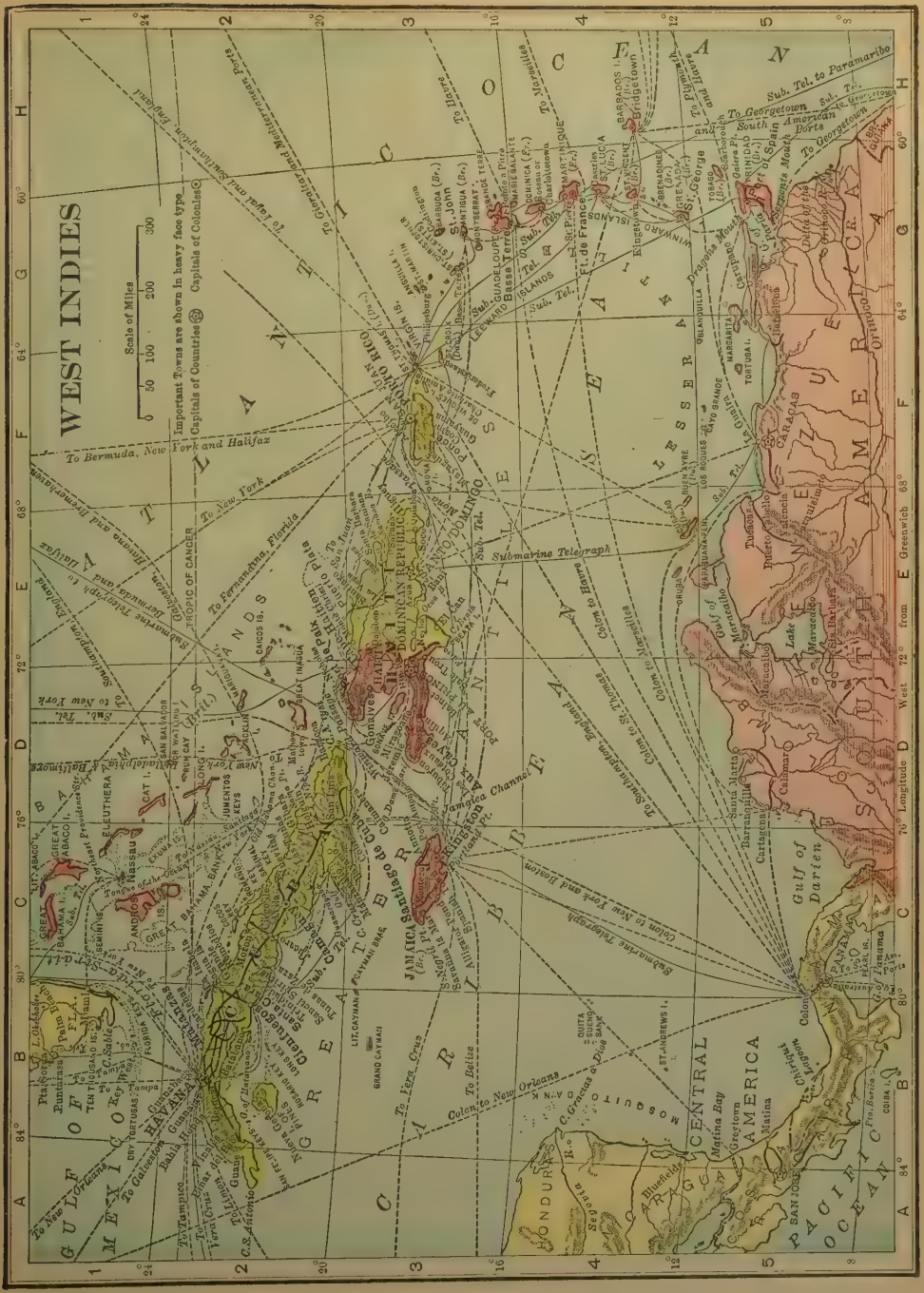

ALASKA
Scale of Miles
0 50 100 200 300
Same Scale as Main Map
CONTINUATION OF ALEUTIAN IS.
ALEUTIAN ISLANDS
ARCTIC OCEAN
BERING SEA
PACIFIC OCEAN
GULF OF ALASKA
ALEXANDER ARCHIPELAGO
QUEEN CHARLOTTE ISLANDS
Hecate Strait
Dixon Entrance
Sitka
Juneau
Skagway
Dawson
Yukon R.
Mt. McKinley
Mt. St. Elias
Mt. Fairweather
Mt. Blackburn
Mt. Wrangell
Valdez
Seward
Kodiak I.
Unalaska I.
Nome
Point Barrow
Kotzebue Sd.
Norton Sd.
St. Lawrence I.
St. Matthew I.
St. Paul I.
Pribilof Is.
St. George I.
Fox Islands
Aleutian Range
Alaska Range
Brooks Range
Arctic Circle
Gulf of Anadyr
Bering Strait
Aleutian Basin
Herbert
Islands of Four Mts.


HAWAII
Scale of Miles
0 10 20 30 40 50
OAHU COUNTY
OAHU
MOLOKAI
M-A-U-I COUNTY
MAUI
LANAI
KAHOOLAWE
KAUAI
NIIHAU
COUNTY
HAWAII
PACIFIC OCEAN
Cable to San Francisco
Cable to Midway I.
KAIEIE-WAHO CHANNEL
ALENUIHAHA CHANNEL
KAMUKAHI CHANNEL
KAUAI CHANNEL
Mauna Loa
Mauna Kea
Haleakala
10,000 Ft.
Crater of
Kilauea
4,040
Hualalai
8,269
Mauna Loa
13,675
Kohala Mts.
5,505
Waialeale
5,080
Kaena Pt.
Barbers Pt.
Diamond Head
Koko Head
Koko Crater
Pearl Harbor
Honolulu
Waianae
Waialua
Kahuku Pt.
Mokapu Pt.
Makapuu Pt.
Kaena Pt.
Laau Pt.
Kaunakakai Har.
Kalaupapa
Kalawao
LEPER SETTLEMENT
Kaiwi Channel
Pailolo Channel
Kaiwi Channel
Kaena Pt.
Kahalipalaoa Lg.
Keomuku
LAHAINA
Auau Channel
Kealaikahiki Pt.
Manele Bay
Manele Lg.
Kealaikahiki Channel
Kealaikahiki Pt.
MOLOKINI I.
KAILUKU
Alalakeiki Channel
Kaena Pt.
OAHU
Kaena Pt.
Waialua
Haleiwa
Waianae
Lahilahi Pt.
Makaha
Kaneohe Bay
Mokapu Pt.
Kaneohe
Waimanalo
Makapuu Pt.
Salt Works
Honolulu
Waikiki
Diamond Head
Koko Head
Koko Crater
Barbers Pt.
Pearl Harbor
Waianae
Cable to Midway I.
Kahuku Pt.
Maunawai
Kahuku
Laie
Hauula
Punaluu
Kahana
Waialua
Kaena Pt.
Kaena Pt.
Ka Lae o Ka Ilio
Laau Pt.
Kalaupapa
Kalawao
Kalaniana Kaluiwa
KALAWAO COUNTY
(LEPER SETTLEMENT)
Waihanau
Halawa Pt.
Mauna Loa
Kaiwi Channel
Pailolo Channel
Kaiwi Channel
Kaunakakai Har.
Kaunakakai
Pukoo
MOLOKAI
Kaena Pt.
Kai O Kaloni
Kaena Pt.
Kahalipalaoa Lg.
Keomuku
Lahaina
LAHAINA
Auau Channel
LANAI
Kealaikahiki Pt.
Manele Bay
Manele Lg.
Kealaikahiki Channel
Kealaikahiki Pt.
MOLOKINI I.
KAILUKU
Alalakeiki Channel
KAHOOLAWE
Honokawai
Honokawai
Kaanapali
Honokawai
Kahului
Kihei
Wailuku
Waikapu
Waihee
Waiehu
Kahului
Makena
Ulupalakua
Kaupo
Kipahulu
Nahiku Ldg.
Kepueokahi Har.
Kauiki Head
Hana
Hamoa
Nahiku
Honolua Pt.
Honolua Lg.
Honokahau
Honokohau
Kahakuloa Pt.
Kahakuloa
Kahakuloa Head
Waihee
Waiehu
Kahului
Wailuku
Waikapu
Makena
Ulupalakua
Kaupo
Kipahulu
Nahiku
Hana
Kauiki Head
Kepueokahi Har.
Nahiku Ldg.
MAUI
COUNTY
M-A-U-I
Kaena Pt.
Kaena Pt.
OAHU
Kaena Pt.
Waialeale
Kahuku Pt.
Maunawai
Kahuku
Laie
Hauula
Punaluu
Kahana
Waialua
Haleiwa
Waianae
Lahilahi Pt.
Makaha
Kaneohe Bay
Mokapu Pt.
Makapuu Pt.
Kaneohe
Waimanalo
Salt Works
Honolulu
Waikiki
Diamond Head
Koko Head
Koko Crater
Barbers Pt.
Pearl Harbor
Waianae
Cable to Midway I.
Upolu Pt.
Honolipu Landing
Mahukona Harbor
Mahukona
Kohala Mts.
5,505
Kawaihae Harbor
Kawaihae
Kaiaha Pt.
Hapuna B.
Kauaua Pt.
Kiholo Bay
Mahaiwelu Pt.
Nawili Pt.
Keahole Pt.
Kaiwi Pt.
Kailua B.
Holualoa
Keikiwahe Pt.
Keawekakeko Pt.
Kealakekua B.
Honaunau B.
Hookena
Kauhako B.
Kauluoa Pt.
Hoopuloa
Okoe Landing
Kauna Pt.
Ka lae Pt.
Kaulualu Har.
Waiohinu
Naalehu
Honuapo
Punaluu Landing
Pahala
Hilea
Keauhou Pt.
Kalapana
Kapoho Sta.
Volcano House
Crater of Kilauea
4,040
Mokuaweoweo
Crater of
Mauna Loa
13,675
Pohaku Mountain View
Pahoa
Kurtistown
Olaa
Olaa
Hilo
Waiakea Landing
Keokea Pt.
Onomea B.
Papaikou
Hilo Bay
Waiakea B.
Alaeli Pt.
Papaaloa
Laupahoehoe
Nokoli Pt.
Makahu Pt.
Hakalau
Hakalau B.
Honomu
Pepeekeo
Hamakua
Kawaihae
Kawaihae
Kohala
Kohala
Kohala

PHILIPPINE ISLANDS
Scale of Miles
0 20 40 60 80 100
Important towns are shown in heavy face type
BATAN AND BABUYAN ISLANDS
Same scale as large map
FORMOSA
(To Japan)
Bashi Channel
BATAN ISLANDS
BABUYAN
CALAYAN
DALUPIRI
CAMIGUIN
FUGA
Claveria
C. Bojeador
C. Engano
Aparri
LUZON
MANILA
Scale
1 Mile
TO GUAM, HAWAII AND SAN FRANCISCO
MINDORO
Mindoro Strait
PANAY
NEGROS
CEBU
BOHOL
LEYTE
SAMAR
MINDANAO
SULU (JOLO)
BASILAN
PALAWAN
Puerto Princesa
Balabac Strait
BRITISH NORTH BORNEO
SULU (JOLO) ARCHIPELAGO
CELEBES SEA
SULU SEA
Surigao Sea
Davao Gulf
Illana Bay
Dapitan
Dipolog
Iligan Bay
Sindangan B.
Basilan Str.
Sibutu
Tawi Tawi
Sandakan
Zamboanga
Cotabato
Davao
Jolo
Bongao
Tawi Tawi Is.
Balut
Saranani
Pt. Pangutaran
Sarangani B.
Mt. Apo
Mayon
Taal
Pinatubo
Iraya
Banahaw
Makiling
Arayat
Cuyo
Cuyo Is.
Cagayancillo
Cagayanes Is.
Tubbataha Is.
Sibutu Is.
Samales Is.
Pangutaran Is.
Calamianes Is.
Busuanga
Culion
Linapacan
Coron
Balabac
Bancoran
St. Miguel
Banguey
Binapusan
Cagayan de Jolo
Sandakan
Longitude East from Greenwich
118°
120°
122°
124°
126°

PORTO RICO
Scale of Miles
0 5 10 15 20
Railroads
Railroads Projected
Improved Roads
Capital
Size of type indicates relative importance of places
C.S. HAMMOND & CO., N.Y.
ATLANTIC OCEAN
CARIBBEAN SEA
SAN JUAN
MAYAGUEZ
PONCE
HUMACAO
GUAYAMA
ARECIBO
AGUADILLA
AGUADA
ISLANDS WEST OF PORTO RICO
Same Scale as Main Map
ISLANDS EAST OF PORTO RICO
Same Scale as Main Map
VIEQUES SOUND
MONA I.
DESECHEO I.
CULEBRA I.
CULEBRITA I.
ATLAS OF THE WORLD
69


CUBA
SCALE OF MILES
0 50 100
112 MILES TO THE INCH
Capitals of Provinces ◎ Submarine Telegraph Cables
GULF OF MEXICO
CARIBBEAN SEA
ATLANTIC OCEAN
GREAT BAHAMA BANK
BAHAMA ISLANDS
FLORIDA
JAMAICA
HAVANA
SANTIAGO DE CUBA
Key West
Miami
Gr. Abaco I.
Eleuthera I.
Great Exuma I.
Long Island
Rum Cay
San Salvador or Watling I.
Crooked I.
Acklin I.
Mayaguana
Great Inagua I.
Cat I.
Great Guana Cay
ANDROS I.
Northeast Providence Strait
Old Bahama Channel
Santaren Channel
Florida Straits
Gulf Stream
Tortugas
Dry
Knights Key
Florida Keys
Salt Key
Bank
Sabal Key
Guajaba I.
Cayo Romano
Camagüey
Gulf of Guacanabo
Manzanillo
Gulf of Buena Esperanza
Gulf of Jobabo
Cayman Brac
Little Cayman
Grand Cayman
George Town
Pedro Bank
Yucatan Channel
Cape San Antonio
C. Corrientes
Frances Pt.
C. Frances
Isle of Pines
Large Key
Cantiles Key
Alcodones Keys
Grand Key
Trinidad
Jatibonico del Sur
Guantanamo
Baracoa
Cape Maisi
Windward Passage
Mona Passage
Mona I.
Navassa I.
Morant Keys
Caicos Is.
Mouchoir Bank
Silver Bank
Caicos Bank
Cochinos Bank
Misteriosa Bank
Serrana Bank
Serranilla Bank
Quita Sueño Bank
Roncador Bank
Nicaragua Rise
Tropic of Cancer
Greenwich
Longitude 81° West from C
C.S. HAMMOND & CO., N.Y.


WEST INDIES
Scale of Miles
0 50 100 200 300
Important towns are shown in heavy face type
Capitals of Countries
Capitals of Colonies
To Bermuda, New York and Halifax
To New York
To Fernandina, Florida
Submarine Telegraph
Cable to Havre
Cable to Marseilles
Cable to St. Thomas
Cable to New York and Boston
Cable to New Orleans
To Vera Cruz
To Belize
To Jamaica
To Colon
To Para
To Georgetown
To Paramaribo
To Demerara
To Barbados
To Martinique
To Guadeloupe
To Dominica
To Montserrat
To Antigua
To St. Kitts
To Nevis
To Tortola
To Virgin Is.
To St. Thomas
To Porto Rico
To Santo Domingo
To Curaçao
To Trinidad
To Grenada
To St. Vincent
To St. Lucia
To Barbados
To Bridgetown
To Port of Spain
To Pitch Lake
To Guiria
To Carupano
To Puerto Cabello
To La Guaira
To Maracaibo
To Coro
To Curaçao
To Aruba
To Kingston
To Port Antonio
To Montego Bay
To Savanna-la-Mar
To Santiago de Cuba
To Guantanamo
To Cienfuegos
To Sagua
To Nuevitas
To Gibara
To Havana
To Matanzas
To Cardenas
To Caibarien
To Manzanillo
To Santiago de Cuba
To Port au Prince
To Jacmel
To Gonaives
To Cape Haitien
To Puerto Plata
To Monte Cristi
To Samana
To Inagua
To Nassau
To Harbour Island
To Eleuthera
To Cat Island
To San Salvador
To Watling Island
To Long Island
To Crooked Island
To Mayaguana
To Great Inagua
To Turks Island
To Grand Turk
To Caicos Is.
To Providenciales
To Cockburn Harbour
To Hamilton
To Bermuda
To Halifax
To Philadelphia
To Baltimore
To Norfolk
To New York
To Charleston
To Savannah
To Brunswick
To Jacksonville
To Fernandina
To St. Augustine
To Daytona
To Palm Beach
To Miami
To Key West
To Tampa
To Cedar Keys
To Apalachicola
To Pensacola
To Mobile
To New Orleans
To Galveston
To Corpus Christi
To Brownsville
To Tampico
To Vera Cruz
To Coatzacoalcos
To Frontera
To Progreso
To Campeche
To Sisal
To Belize
To Puerto Barrios
To Livingston
To Omoa
To Puerto Cortes
To Trujillo
To Roatan
To Utila
To Bonacca
To Swan Is.
To Cape Gracias a Dios
To Bluefields
To Greytown
To Port Limon
To Chiriqui Lagoon
To Bocas del Toro
To Colon
To Panama
To Puerto Bello
To Porto Bello
To Chagres
To Aspinwall
To Matina
To Limon
To Puntarenas
To San Jose
To Caldera
To Corinto
To Salinas
To Acajutla
To La Libertad
To La Union
To Amapala
To Puerto Cortes
To Belize
To Progreso
To Campeche
To Sisal
To Tampico
To Vera Cruz
To Coatzacoalcos
To Frontera
To Tuxpan
To Tampico
To Vera Cruz
To Coatzacoalcos
To Frontera
To Progreso
To Campeche
To Sisal
To Belize
To Puerto Barrios
To Livingston
To Omoa
To Puerto Cortes
To Trujillo
To Roatan
To Utila
To Bonacca
To Swan Is.
To Cape Gracias a Dios
To Bluefields
To Greytown
To Port Limon
To Chiriqui Lagoon
To Bocas del Toro
To Colon
To Panama
To Puerto Bello
To Porto Bello
To Chagres
To Aspinwall
To Matina
To Limon
To Puntarenas
To San Jose
To Caldera
To Corinto
To Salinas
To Acajutla
To La Libertad
To La Union
To Amapala
ATLANTIC OCEAN
CARIBBEAN SEA
GULF OF MEXICO
CENTRAL AMERICA
SOUTH AMERICA
PACIFIC OCEAN
Gulf of Darien
Gulf of Maracaibo
Lake Maracaibo
Gulf of Cariaco
Gulf of Paria
Orinoco R.
Amazon R.
Panama R.
Chagres R.
Motagua R.
Ulua R.
Segovia R.
Coco R.
Rio Grande
Tuxpan R.
Panuco R.
Mississippi R.
Apalachicola R.
Suwanee R.
St. Johns R.
Savannah R.
Cape Fear R.
Delaware R.
Chesapeake Bay
Hudson R.
Long Island Sound
Narragansett Bay
Boston Harbor
Halifax Harbor
Bermuda Is.
Lesser Antilles
Greater Antilles
Windward Is.
Leeward Is.
Virgin Is.
Bahama Is.
Turks Is.
Caicos Is.
Cayman Is.
Swan Is.
Corn Is.
Roatan
Utila
Bonacca
Providencia
San Andres
Margarita
Tortuga I.
Los Roques
Las Aves
Orchila
Blanquilla
Aruba
Curaçao
Bonaire
Trinidad
Tobago
Barbados
Grenada
St. Vincent
St. Lucia
Martinique
Guadeloupe
Dominica
Montserrat
Antigua
St. Kitts
Nevis
Tortola
St. Thomas
St. John
Porto Rico
Santo Domingo
Jamaica
Cuba
Haiti
Havana
Nassau
Kingston
Port au Prince
Santiago de Cuba
Guantanamo
Cienfuegos
Matanzas
Cardenas
Caibarien
Manzanillo
Gibara
Nuevitas
Sagua
Monte Cristi
Puerto Plata
Samana
Inagua
Eleuthera
Cat Island
San Salvador
Watling Island
Long Island
Crooked Island
Mayaguana
Turks Island
Grand Turk
Caicos Is.
Providenciales
Cockburn Harbour
Hamilton
Bermuda
Halifax
Philadelphia
Baltimore
Norfolk
New York
Charleston
Savannah
Brunswick
Jacksonville
Fernandina
St. Augustine
Daytona
Palm Beach
Miami
Key West
Tampa
Cedar Keys
Apalachicola
Pensacola
Mobile
New Orleans
Galveston
Corpus Christi
Brownsville
Tampico
Vera Cruz
Coatzacoalcos
Frontera
Tuxpan
Progreso
Campeche
Sisal
Belize
Puerto Barrios
Livingston
Omoa
Puerto Cortes
Trujillo
Roatan
Utila
Bonacca
Swan Is.
Cape Gracias a Dios
Bluefields
Greytown
Port Limon
Chiriqui Lagoon
Bocas del Toro
Colon
Panama
Puerto Bello
Porto Bello
Chagres
Aspinwall
Matina
Limon
Puntarenas
San Jose
Caldera
Corinto
Salinas
Acajutla
La Libertad
La Union
Amapala
Maracaibo
La Guaira
Puerto Cabello
Carupano
Guiria
Port of Spain
Pitch Lake
Georgetown
Paramaribo
Demerara
Barbados

MEXICO
Scale of Miles
0 50 100 200 300 400 500
Railroads
Railroads Projected
Size of type indicates relative importance of places
C.S HAMMOND & CO., N.Y.
Longitude 104° West from 100° Greenwich
UNITED STATES
MEXICO
GULF OF MEXICO
GULF OF CAMPECHE
PACIFIC OCEAN
GULF OF TEHUANTEPEC
REVILLAGIGEDO ISLANDS
TROPIC OF CANCER
Rio Grande
Mexico
Guadalajara
Monterey
Mazatlan
Vera Cruz
Tampico
San Antonio
Galveston
New Orleans
Chihuahua
Durango
Acapulco
GUATEMALA
HONDURAS
BELIZE
SAN SALVADOR

CENTRAL AMERICA
Scale of Miles
0 50 100 200 300
Railroads
Submarine Telegraph Lines
Capitals
Size of type indicates Relative importance of places
Gulf of Campeche
Sebancuy
Chicbul
Carmen
Frontera
Bacalar
Corozal
Chetumal
Orange Walk
San Juan Bautista
Chinchanha
Palenque
Tenosique
Tikal
Holmul
San Cristobal
La Libertad
Flores
Dolores
S. Bartolme
Sayaxche
Peten
BRITISH HONDURAS
Belize
CHINCORA BANK
AVESBERGIS CAY
San Pedro
LIGHTHOUSE REEF
TURNEFFE IS.
LONG CAY
GLOVERS REEF
Gulf of Honduras
BAY IS.
RONACA I.
UTILA
Trujillo
Cameron
Pt. Patuca
Caratasca Lagoon
GUATEMALA
Huehuetenango
Quezaltenango
Solola
Totonicapan
Sta Cruz
Salamá
Coban
Sta Barbara
Pijas
Omoa
Pedro
Sta Rosa
Ocos
Champerico
NEW GUATEMALA
Amatitlan
Escuintla
San Jose
Sonsonate
Acajutla
SALVADOR
La Libertad
Zacatecoluca
La Concordia
Lempa R.
Figuralpa
Gulf of Fonseca
Amapala
Conchagua
Chinandega
Leon
Managua
Masaya
Granada
Lake Nicaragua
Brito
Orosi Vol.
Rivas
S. Juan del Sur
Papagayo Gulf
C. Elena
Gulf of Nicoya
Nicoya
COSTA RICA
San Jose
Turrialba Vol.
Irazu Vol.
Cartago
Limon
C. Blanco
Gulf of Dulce
Pt. Llereno
C. Matapalo
Gulf of Panama
Pt. Burica
Mt. Chiriqui
Chiriqui L.
R. Grande de Terraba
Tabira R.
Boca del Toro
COLON I.
Belen
David
Remedios
Aguadulce
Santiago
Las Tablas
Los Santos
LAZUERO
BECAS IS.
CONTRERAS IS.
CEBACO
COIBA I.
ALCATRAZ I.
ST PAMBA I.
Montijo B.
Mariata Pt.
Puercos Pt.
C. Mala
Pt. Pinas
C. Marzo
Cupica B.
Solano B.
Frontinoo
Murri
Antioquia
MEDELLIN
Sierra de Ayapel
Caceres
Yarumal
Amalfi
Pto. Berrio
Nechi R.
Caucasia
Zaragoza
Remedios
Segovia
Yolombo
Barranquilla
Sabanalarga
Cartagena
Baru I.
Barbacoas B.
Manatee
Carmen
S. Juan de Cienaga
Sabanilla
Sta Marta
S. Bernardo Is.
Morrosquillo Gulf
Lorica
Magangue
Mompox
Gulf of Darien
Pt. Arenas
Mosquito Gulf
Colon
Chagres
Pt. S. Blas
Gulf of S. Blas
Mandinga Pt.
Mosquito Coast
Mosquito Reservation
Waunta
Prinzapolca
Bluefields
Monkey Pt.
Matina B.
San Juan del Norte
Pearl L.
GR CORN I.
SMALL CORN I.
CAYOS DE ALBUQUERQUE
ST. ANDREWS I. (To Colombia)
OLD PROVIDENCE I. (To Colombia)
RONCADOR BANK
QUITO SUENO BANK
SERRANA BANK
ROSALIND BANK
SERRANILLA BANK
BAJO NUEVA
PEDRO BANK
PORTLAND BANK
HALF MOON REEFS
SORDA BANK
CAXONES OR MOBBIES
C. Gracias a Dios
Gracias-a-Dios
MOSQUITO CAYS
Cocos Wassa
Segovia
Coco Mts.
Dipilto Mts.
Jalapa
Unticalpa
Tegucigalpa
Dant
Pespire
Nacaome
Cholutteca
Comayagua
La Esperanza
Cedros
La Paz
Yoro
Caucasca
Sta Barbara
Ocotepeque
Chiquimula
Gulf of Honduras
Cayman (Britain)
GRAND CAYMAN
Georgetown
ISTERIOSA BANK
JAMAICA
Falmouth
Montego Bay
Savanna la Mar
Black River
Spanish Town
Kingston
Port Antonio
Morant Pt.
Portland Pt.
Navassa I.
HAITI
Turk's Island Passage
Caribbean Sea
Pacific Ocean
Atlantic Ocean

SOUTH AMERICA
Scale of Miles
0 100 200 400 600 800
Important towns are shown in heavy face type
Longitude West from Greenwich
CARIBBEAN SEA
ATLANTIC OCEAN
PACIFIC OCEAN
CENTRAL AMERICA
COLOMBIA
VENEZUELA
GUIANA
BRITISH
DUTCH
FRENCH
ECUADOR
PERU
BRAZIL
BOLIVIA
PARAGUAY
URUGUAY
CHILE
ARGENTINA
Pt. Gallinas
Barranquilla
Cartagena
Mosquito Gulf
Panama
Gulf of Panama
Gulf of Darien
Medellin
Antioquia
Gulf of Corrientes
Buenaventura
Tumaco
C. San Francisco
Chimborazo
Guayaquil
Guayaquil R.
Pt. Parinas
Chiclayo
Trujillo
Callao
Lima
CINCHA IS.
Arequipa
Mollendo
Arica
Iquique
Tocopilla
TROPIC OF CAPRICORN
Antofagasta
ST. FELIX (To Chile)
ST. AMBROSE (To Chile)
Taltal
Caldera
Serena
Ovalle
Mt. Aconcagua
Valparaiso
SANTIAGO
MAS A FUERA I. (To Chile)
MAS A TIERRA I. (To Chile)
Concepcion
Temuco
Puerto Montt
Ancud
CHILOE I.
G. of Corcovado
CHONOS ARCH.
Gulf of Penas
CAMPANA I.
WELLINGTON I.
MADRE DE DIOS I.
Str. of Magellan
SANTA INES I.
Cape Horn
STATEN I.
WOLLASTON IS.
TIERRA DEL FUEGO
Mt. Darwin
Strait of Magellan
Grande Bay
Arenas
Port Stanley
FALKLAND IS. (Br.)
SOUTH GEORGIA (Br.)
Rawson
Puerto Madryn
S. Matias Gulf
Gulf of St. George
C. Tres Puntas
Bahia Blanca
General Roca
General Acha
Azul
Tandil
Rosario
Mercedes
BUENOS AIRES
Bahia Blanca
Blanca Bay
Carmen
Santa Rosa
Mendoza
San Luis
Cordoba
Villa Maria
Catamarca
Tucuman
Jujuy
Salta
Oran
Tarija
Potosi
SUCRE
Cochabamba
Santa Cruz
La Paz
Mt. Illimani
Titicaca
Cuzco
Trinidad
Matto Grosso
Cuyaba
Goyaz
Paracatu
Diamantina
Itambe Mt.
Rio de Contas
Bahia
Cachoeira
Bomjardim
Aracajú
Penedo
Alagoas
Pernambuco
Parahiba
Ceará
Aracati
C.S. Roque
Natal
Mossoró
Cajazeiras
Theresina
Carolina
Parnahiba
Maranhão
Grajaú
Para
Pará or Tocantins R.
Mouths of the Amazon R.
EQUATOR
Macapa
Obidos
Manaos
Rio Negro
Amazon R.
Iça R.
Iquitos
Jurua R.
Purus R.
Madeira R.
Tapajos R.
Xingu R.
Tocantins R.
Araguaya R.
S. Francisco R.
Santarem
S. Francisco
Santa Maria
Jo... R.
Victoria
Campos
Petropolis
Campinas
São Paulo
RIO DE JANEIRO
Santos
Paranaguá
Curitiba
Destarro
Laguna
Porto Alegre
Rio Grande do Sul
Pelotas
Rio Pardo
Cruz Alta
Haquaxo
Paraná
Paraguay R.
Villa Rica
Villa Pilar
Corrientes
Concepcion
Puerto Pacheco
Matto Grosso
Cuyaba
Matto Grosso
Paraguay R.
Pilcomayo R.
Bermejo R.
Iguazu R.
Uruguay R.
Rio Negro
Negro R.
Colorado R.
Chuy
MONTEVIDEO
Plata River
La Plata
C. Corrientes
Cayenne
C. Orange
Georgetown
Paramaribo
Orinoco Delta
Caracas
Valencia
Merida
Maracaibo
Gulf of Venezuela
Ciudad Bolivar
Barcelona
Cumana
Maracaibo L.
Sierra Nevada
Cordillera de Merida
Cordillera de Perija
Cordillera de Bogota
Cordillera Central
Cordillera Occidental
Cordillera Oriental
Andes
Bogota
Atures
Ibague
Medellin
Cucuta
Barcelona
Cumana
Barbadoes
Trinidad
Port of Spain
Tobago
Grenada
St. Vincent
St. Lucia
Martinique (Fr.)
Curaçoa
Aruba
Margarita
Los Roques
La Guaira
Puerto Cabello
Coro
Tortuga
Margarita
Pt. Gallinas
Gulf of Darien
Gulf of Panama
Gulf of Corrientes
Gulf of Penas
Gulf of St. George
Gulf of Corcovado
S. Matias Gulf
Blanca Bay
Bahia Blanca
Plata River
Str. of Magellan
Strait of Magellan
Mouths of the Amazon R.
Para or Tocantins R.
Cape Horn
Mt. Darwin
Mt. Aconcagua
Mt. Illimani
Titicaca
Andes
Cordillera Central
Cordillera Occidental
Cordillera Oriental
Sierra Nevada
Cordillera de Merida
Cordillera de Perija
Cordillera de Bogota
Andes
Serra do Mar
Serra Geral Mts.
Itambe Mt.
Serra do Espinhaço
Serra da Mantiqueira
Serra do Espinhaço
Serra do Mar
Serra Geral Mts.
Andes
Andes
Andes

ATLANTIC OCEAN
INDIAN OCEAN
AFRICA
EUROPEAN POSSESSIONS
Great Britain
Germany
France
Italy
Spain
Portugal
AZORES (Port.)
MADEIRA (Port.)
CANARY IS. (Sp.)
CAPE VERDE IS. (To. Port.)
ASCENSION I. (Br.)
ST. HELENA (Br.)
MOROCCO
ALGERIA
TUNIS
TRIPOLI
FEZZAN
EGYPT
Libyan Desert
Nubian Desert
Arabian Desert
MILITARY TERRITORIES (French)
SENEGAL
NORTHERN NIGERIA
SOUTHERN NIGERIA
IVORY COAST
KAMERUN
FRENCH CONGO
BELGIAN CONGO
ANGOLA
GERMAN SOUTH WEST AFRICA
BECHUANALAND
BRITISH EAST AFRICA
GERMAN EAST AFRICA
ABYSSINIA
ITALIAN SOMALILAND
PORTUGUESE EAST AFRICA
MOZAMBIQUE
CAPE COLONY
TRANSVAAL COLONY
ORANGE RIVER COLONY
NATAL
ZANZIBAR
MOMBASA
DAR-ES-SALAM
MADAGASCAR
TROPIC OF CANCER
TROPIC OF CAPRICORN
EQUATOR
Scale of Miles
0 200 100 600 800 1000
Important towns are shown in heavy face type
Longitude West
Longitude East from Greenwich
CAPE VERDE IS. (To. Port.)
Same scale as main map

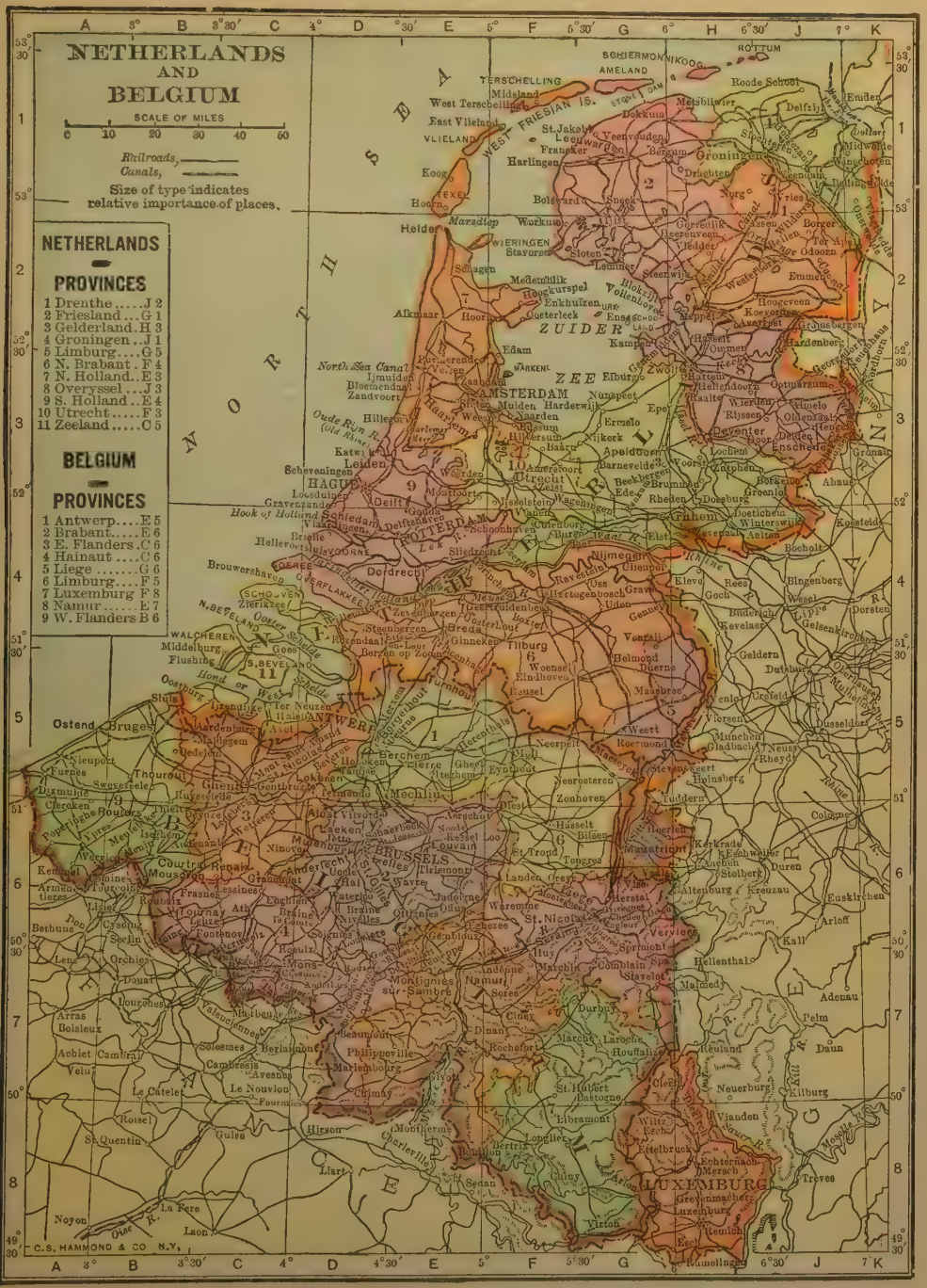
EUROPE
Scale of Miles
0 100 200 400 600
Important towns shown in heavy face type
Longitude East 20° from Greenwich
ARCTIC OCEAN
ATLANTIC OCEAN
NORTH SEA
BALTIC SEA
MEDITERRANEAN SEA
BLACK SEA
CASPIAN SEA
ARAL SEA
BAY OF BISCAY
ENGLISH CHANNEL
ADRIATIC SEA
TYRRHENIAN SEA
IONIAN SEA
AEGEAN SEA
BRITISH ISLES
FRANCE
SPAIN
PORTUGAL
GERMANY
AUSTRIA
HUNGARY
ITALY
SWITZERLAND
BELGIUM
HOLLAND
DENMARK
SWEDEN
NORWAY
RUSSIA
TURKEY
AFRICA
ICELAND
MALTA
CRETE
CYPRUS
Strait of Denmark
North C.
Hammerfest
Archangel
Alexandrovsk
NOVAYA ZEMBLA
KOLGUEV I.
ARCTIC CIRCLE
LOFODEN IS.
FARGE IS.
SHETLAND IS.
ORKNEY IS.
HEBRIDES
Trondhjem
Bergen
Stavanger
Christiania
Gothenburg
Helsingfors
Lapland
Uleaborg
Kemi
Gulf of Bothnia
Gulf of Finland
ST. PETERSBURG
Moscow
Tula
Orel
Kursk
Kharkof
Ekaterinoslaf
Rostof
Astrakhan
Saratof
Samara
Kasan
Nizhni Novgorod
Vologda
Archangel
Kolas
Kem
Onega
L.
Ladoga
Lake Peipus
Riga
Libau
Dunaburg
Wilna
Minsk
Brest Litovsk
Warsaw
Cracow
Lemberg
Odessa
Sevastopol
Kertch
Yenikale
Taganrog
Mariupol
Berdiansk
Melitopol
Perekop
Simferopol
Kherson
Nikolaief
Elizabethgrad
Poltava
Tchernigof
Nyejin
Smolensk
Viatka
Perm
Ekaterinburg
Tobolsk
Tiumen
Shenkursk
Kotlas
Ustsysolsk
Pechora R.
Petchora
Ural R.
Ural Mts.
Orenburg
Uralsk
Aralsk
Khiva
Petrovsk
Baku
Tiflis
Batoum
Mt. Elbruz
Caucasus Mts.
Volga R.
Don R.
Dnieper R.
Dniester R.
Vistula R.
Oder R.
Elbe R.
Rhine R.
Danube R.
Seine R.
Loire R.
Rhone R.
Po R.
Tagus R.
Ebro R.
Guadalquivir R.
Douro R.
Garonne R.
Thames R.
Severn R.
Mersey R.
Humber R.
Forth R.
Clyde R.
Shannon R.
Lough Neagh
Lough Erne
Dublin
Belfast
Cork
Limerick
Galway
Waterford
Wexford
Londonderry
Glasgow
Edinburgh
Newcastle
Liverpool
Manchester
Birmingham
Sheffield
Leeds
Hull
Norwich
Yarmouth
Ipswich
Colchester
Dover
Portsmouth
Southampton
Plymouth
Falmouth
Land's End
Queenstown
Holyhead
Aberdeen
Dundee
Inverness
Oban
Stornoway
Skye
Islay
Arran
Isle of Man
Isle of Wight
Channel Islands
Jersey
Guernsey
Alderney
Sark
Havre
Cherbourg
Dieppe
Boulogne
Calais
Dunkirk
Ostend
Antwerp
Ghent
Bruges
Brussels
Liege
Namur
Mons
Charleroi
Luxemburg
Metz
Nancy
Strasbourg
Mulhouse
Belfort
Besançon
Dijon
Lyons
Grenoble
Chambéry
Marseilles
Toulon
Nice
Bastia
Corsica
Sardinia
Cagliari
Palermo
Messina
Naples
Rome
Leghorn
Genoa
Milan
Turin
Venice
Trieste
Fiume
Pola
Zara
Spalato
Ragusa
Cattaro
Durazzo
Valona
Corfu
Cephalonia
Zante
Patras
Athens
Salonika
Volo
Larissa
Janina
Monastir
Uskub
Sofia
Philippopolis
Adrianople
Rustchuk
Varna
Silistria
Bucharest
Ploesti
Galatz
Jassy
Kishenef
Constantinople
Smyrna
Angora
Konia
Mosul
Damascus
Beirut
Jerusalem
Alexandria
Cairo
Suez
Port Said
Tripoli
Tunis
Bizerta
Algiers
Oran
Bona
Constantine
Gibraltar
Malaga
Cadiz
Seville
Valencia
Alicante
Barcelona
Tortosa
Tarragona
Majorca
Minorca
Madrid
Toledo
Salamanca
Valladolid
Burgos
Saragossa
Pamplona
Bilbao
San Sebastian
Vigo
Oporto
Lisbon
Coimbra
Evora
Badajoz
Cape St. Vincent
Cape Finisterre
Corunna
Santander
Gijon
Oviedo
Leon
Zamora
Salamanca
Ciudad Real
Cordova
Granada
Almeria
Murcia
Cartagena
Ceuta
Tangier
Fez
Mogador
Canary Islands
Madeira
Azores
Faroe Islands
Iceland
Reykjavik
Hekla
Geysir
Thingvalla
Faxa Bay
Vatna Jokull
Hecla
Jan Mayen
Spitzbergen
Nova Zembla
Kolguev I.
Waigatz I.
Franz Josef Land
Wrangel I.
New Siberian Islands
Lena R.
Yenisei R.
Ob R.
Irtish R.
Siberia
Kara Sea
White Sea
Gulf of Archangel
Gulf of Bothnia
Gulf of Finland
Gulf of Riga
Gulf of Lyons
Gulf of Genoa
Gulf of Venice
Gulf of Corinth
Gulf of Patras
Gulf of Salonika
Gulf of Smyrna
Gulf of Sidra
Gulf of Gabes
Gulf of Cadiz
Gulf of Gascony
Gulf of Sidra
Strait of Gibraltar
Strait of Dover
Strait of Bonifacio
Strait of Messina
Strait of Otranto
Strait of Kertch
Strait of Yenikale
Bosphorus
Dardanelles
Sea of Marmora
Sea of Azof
Sea of Aral
Caspian Sea
Lake Ladoga
Lake Onega
Lake Peipus
Lake Constance
Lake Geneva
Lake Como
Lake Maggiore
Lake Garda
Lake Trasimeno
Lake Balaton
Lake Neusiedler
Lake Plattensee
Lake Ochrida
Lake Scutari
Lake Prespa
Lake Vistonis
Lake Van
Lake Urmia
Lake Tiberias
Dead Sea
Sea of Galilee
Jordan R.
Euphrates R.
Tigris R.
Nile R.
Red Sea
Persian Gulf
Arabian Sea
Mediterranean Sea
Black Sea
Caspian Sea
Aral Sea
Khiva
Bokhara
Samarkand
Tashkent
Merv
Herat
Kandahar
Cabul
Ghuznee
Peshawur
Khyber Pass
Bolan Pass
Quetta
Candahar
Persia
Afghanistan
Baluchistan
Arabia
Egypt
Abyssinia
Nubia
Sahara
Tripoli
Barbary
Algeria
Tunis
Morocco
Fez
Mogador
Canary Islands
Madeira
Azores
Cape Verde Islands
Cape Bojador
Cape Blanco
Cape Verde
Cape Guardafui
Cape of Good Hope
Cape Horn
Cape Finisterre
Cape St. Vincent
Cape Matapan
Cape Malea
Cape Colonna
Cape Sunium
Cape Spada
Cape Bon
Cape Carthage
Cape Blanco
Cape Verde
Cape Guardafui
Cape of Good Hope
Cape Horn
Cape Finisterre
Cape St. Vincent
Cape Matapan
Cape Malea
Cape Colonna
Cape Sunium
Cape Spada
Cape Bon
Cape Carthage

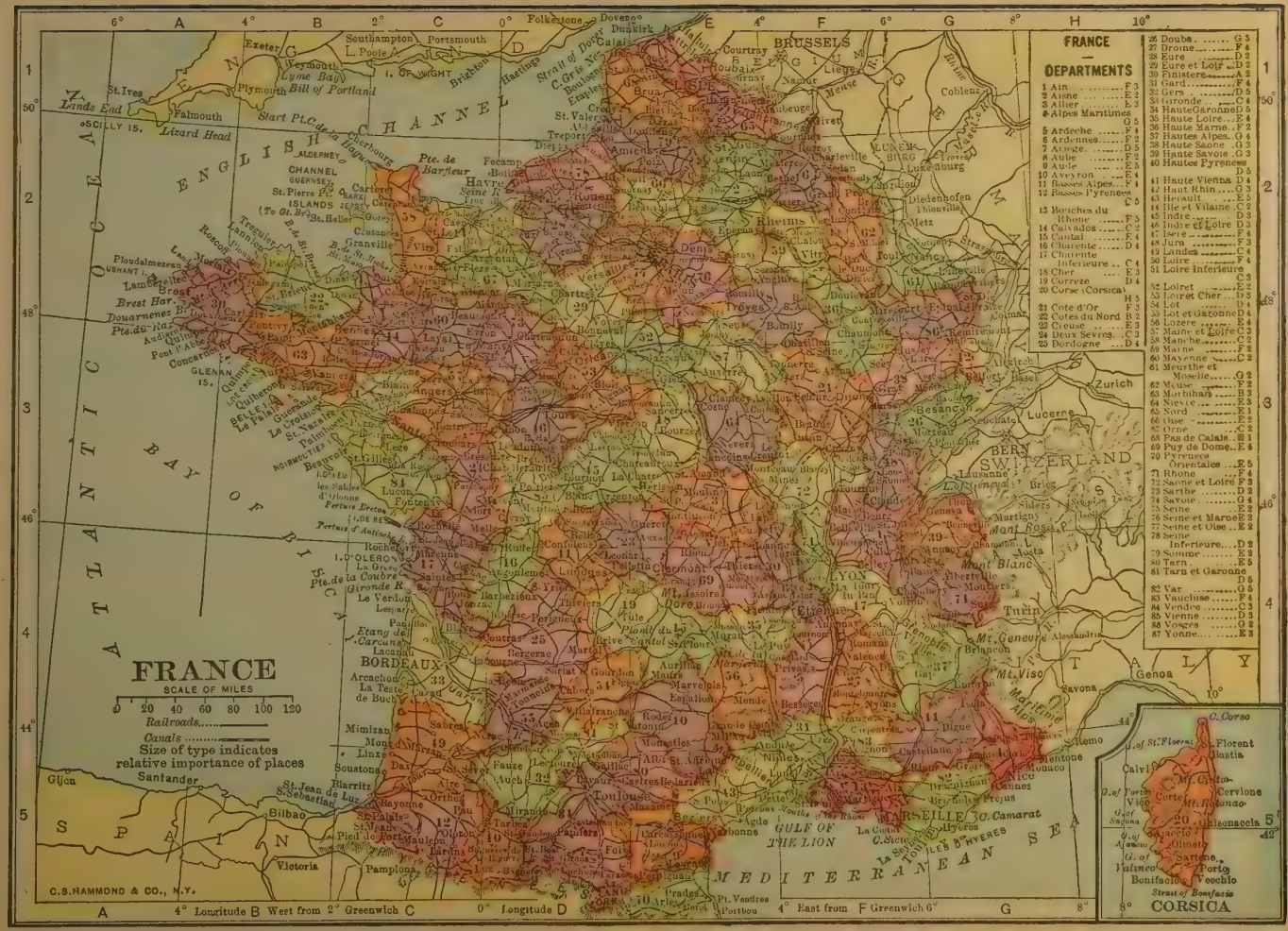
BRITISH ISLES
Scale of Miles
0 25 50 100
Through Railroads
Other Railroads
Submarine Cables
Important towns are shown in heavy face type
C. S. HAMMOND & CO., N.Y.
ATLANTIC OCEAN
NORTH SEA
IRISH SEA
ST. GEORGE'S CHANNEL
Bristol Channel
ENGLISH CHANNEL
Hebrides
Shetland Islands
Orkney Is.
Scotland
Ireland
England
Wales
Longitude West from Greenwich
Long. East
Scale of Miles
Through Railroads
Other Railroads
Submarine Cables
Important towns are shown in heavy face type
Fell Sd.
UNST
FETLAR
YELL
SHETLAND
St. Magnus B.
PAPA STOUR
WHALSEY
ISLANDS
MAINLAND
FOULA
GRESSAY
Lerwick
Sumburgh Hd.
FAIR I.
SANDAY
ORKNEY IS.
STRONSAY
N. RONALDSHAY
PAPA WESTRAY
WESTRAY
SANDAY
ROUSAY
STRONSAY
MAINLAND
EGILSAY
ORKNEY IS.
Kirkwall
HOY
S. RONALDSHAY
Pentland Firth
Cape Wrath
Strathy Pt.
Butt of Lewis
Duncansby Hd
Noss Hd.
Wick
Thurso
Helmsdale
Dornoch Firth
Tarbat Ness
Moray Firth
Inverness
Fraserburgh
Peterhead
Buchan Ness
Aberdeen
Stonehaven
Montrose
Arbroath
Dundee
Cupar
Kirkcaldy
Leith
Firth of Forth
Haddington
Berwick-upon-Tweed
Edinburgh
Dunbar
Peebles
Selkirk
Jedburgh
Cheviot Hills
Tynemouth
South Shields
Sunderland
Newcastle
Gateshead
Durham
W. Hartlepool
Stockton
Middlesbrough
Darlington
Whitby
Scarborough
Flamborough Hd.
Bridlington
Hull
York
Leeds
Burnley
Bradford
Huddersfield
Great Grimsby
Spurn Hd.
Humber Mouth
Doncaster
Lincoln
The Wash
Cromer
Boston
Kings Lynn
Yarmouth
Norwich
Peterborough
Grantham
Nottingham
Mansfield
Sheffield
Stockport
Chester
Liverpool
Birkenhead
Manchester
Salford
Oldham
Preston
Blackburn
Halifax
Morecambe B.
Lancaster
Barrow
Douglas
ISLE OF MAN
Whitehaven
Workington
Carlisle
Solway Firth
Dumfries
Annan
Moffat
Hawick
Galashiels
Kelso
Berwick
Tweed
Lanark
Ayr
Paisley
Glasgow
Greenock
Dumbarton
Kilmarnock
Firth of Clyde
Stirling
Perth
Dundee
Forfar
Montrose
Arbroath
Inverness
Caledonian Canal
Loch Ness
Fort William
Oban
Colonsay
Islay
Jura
Gulf of Corryvreckan
Passage of Corryvreckan
Firth of Lorne
Mull
Coll
Tiree
Barra Hd.
Barra Is.
Gulf of Hebrides
Rum I.
Canna I.
Eigg
Skye
Sound of Sleat
Kyle of Lochalsh
Stornoway
Loch Erisort
Harris
The Minch
Little Minch
Outer Hebrides
North Uist
Benbecula
South Uist
Loch Boisdale
Eye Pen
Lewis
Loch Roag
Loch Seaforth
Gairloch
Dingwall
Stromeferry
Kyle Rhea
Glenelg
Mallaig
Loch Nevis
Loch Hourn
Loch Alsh
Loch Carron
Loch Torridon
Loch Ewe
Loch Maree
Loch Broom
Ullapool
Tain
Dornoch
Dornoch Firth
Cromarty Firth
Inverness
Nairn
Forres
Elgin
Banff
Buckie
Cullen
Portsoy
Banff
Macduff

GERMANY
WESTERN SECTION
SCALE OF MILES
0 20 40 60
DENMARK
SCHLESWIG
HOLSTEIN
Kiel
Flensburg
Husum
Tondern
Sylt I.
Helgoland
Helgoland Bay
North Sea
Friesian Is.
Wangerooge
Baltic Sea
Fehmern I.
Dars Pt.
Zingst
Gjedser
Rostock
Warnemünde
Lübeck
Travemünde
Wismar
Hamburg
Altona
Harburg
MECKLENBURG
SCHWERIN
STRELITZ
Neustrelitz
Parchim
Plau
Müritz See
Güstrow
Teterow
Malchin
Demmin
Stettin
Oldenburg
Bremen
Bremerhaven
Cuxhaven
Emden
Wilhelmshaven
Jever
Varel
Elsfleth
Vegesack
Stade
Buxtehude
Cuxhaven
Geestemünde
Hanover
HANOVER
Celle
Lüneburg
Luneburg Heath
Uelzen
Dannenberg
Ludwigslust
Perleberg
Pritzwalk
Wittstock
Fürstenberg
Havel R.
Elbe R.
Weser R.
Ems R.
Aller R.
Leine R.
Fulda R.
Werra R.
Diemel R.
Lippe R.
Rhine R.
Ruhr R.
Sieg R.
Lahn R.
Main R.
Neckar R.
Danube R.
Inn R.
Isar R.
Lech R.
Iller R.
Naab R.
Regen R.
Vils R.
Salzach R.
Enns R.
Traun R.
Drau R.
Mur R.
Rhine Prov.
Westphalia
Münster
Osnabrück
Minden
Bielefeld
Lippe
Detmold
Brunswick
Hildesheim
Hameln
Wolfenbüttel
Magdeburg
Prussia
Saxony
Anhalt
Halle
Leipzig
Dessau
Zerbst
Bernburg
Köthen
Merseburg
Naumburg
Weissenfels
Zeitz
Altenburg
Chemnitz
Zwickau
Annaberg
Erzgebirge
Thuringia
Gotha
Erfurt
Weimar
Eisenach
Arnstadt
Meiningen
Coburg
Hesse
Cassel
Marburg
Waldeck
Frankenberg
Rotenburg
Fritzlar
Eschwege
Hersfeld
Fulda
Vacha
Nassau
Wiesbaden
Frankfort
Hanau
Darmstadt
Mainz
Mayence
Aschaffenburg
Giessen
Wetzlar
Limburg
Rhenish Prussia
Cologne
Aachen
Coblenz
Bonn
Düsseldorf
Elberfeld
Barmen
Crefeld
Essen
Dortmund
Bochum
Hagen
Iserlohn
Arnsberg
Siegen
Lennep
Remscheid
Mülheim
Duisburg
Ruhrort
Hamm
Soest
Warstein
Paderborn
Detmold
Lemgo
Höxter
Corvey
Holzminden
Elmbeck
Northeim
Göttingen
Einbeck
Hanover
Linden
Hameln
Hildesheim
Peine
Wolfenbüttel
Brunswick
Helmstedt
Gandersheim
Seesen
Osterode
Harzburg
Goslar
Clausthal
Blankenburg
Stassfurt
Aschersleben
Bernburg
Cöthen
Bitterfeld
Torgau
Ellenburg
Wittenberg
Jüterbog
Luckenwalde
Belzig
Brandenburg
Potsdam
Berlin
Spandau
Charlottenburg
Grunewald
Teltow
Beeren
Frankfort
Cottbus
Guben
Sorau
Luckau
Calau
Lübben
Spremberg
Hoyerswerda
Bautzen
Görlitz
Lausitzer Neisse R.
Oder R.
Elbe R.
Saale R.
Weser R.
Ems R.
Rhine R.
Moselle R.
Lahn R.
Main R.
Neckar R.
Danube R.
Inn R.
Isar R.
Lech R.
Iller R.
Naab R.
Regen R.
Vils R.
Salzach R.
Enns R.
Traun R.
Drau R.
Mur R.
Bavaria
Palatinate
(to Bavaria)
Ludwigshafen
Mannheim
Heidelberg
Kaiserslautern
Zweibrücken
Landau
Speyer
Worms
Alzey
Kreuznach
Bingen
Rochem
St. Goar
Wiesbaden
Biebrich
Hochheim
Rüdesheim
Bingerbrück
Coblenz
Ehrenbreitstein
Andernach
Neuwied
Remagen
Bonn
Cologne
Mülheim
Deutz
Düsseldorf
Elberfeld
Barmen
Crefeld
Duisburg
Ruhrort
Essen
Dortmund
Bochum
Hagen
Iserlohn
Arnsberg
Siegen
Lennep
Remscheid
Mülheim
Aachen
Malmedy
Adenau
Mayen
Rochem
Bitburg
Wittlich
Zell
Bernkastel
Trèves
Saarburg
Merzig
Saarlouis
Saarbrücken
Forbach
Metz
Sarreguemines
Thionville
Diedenhofen
Luxemburg
Grevenmacher
Echternach
Ettelbrück
Diekirch
Clervaux
Wiltz
Arlon
Neufchâteau
Virton
Longwy
Briey
Metz
Nancy
Lorraine
Château Salins
Pfalzburg
Marsal
Avricourt
Dieuze
Morhange
Sarrebourg
Lunéville
Baccarat
Saarburg
Zabern
Strasburg
Alsace
Schlettstadt
Colmar
Rappoltsweiler
Markirch
Münster
Kaysersberg
Gebweiler
Thann
Mülhausen
Altkirch
Belfort
Epinal
Remiremont
Bruyères
Gerardmer
Raon l'Etape
St. Dié
Schirmeck
Molsheim
Wasselonne
Saverne
Hagenau
Weissenburg
Landau
Germersheim
Bruchsal
Karlsruhe
Rastadt
Baden
Ettlingen
Pforzheim
Durlach
Maxau
Speyer
Heidelberg
Mannheim
Ludwigshafen
Neustadt
Kaiserslautern
Zweibrücken
Landau
Alzey
Worms
Darmstadt
Aschaffenburg
Hanau
Frankfort
Offenbach
Hochheim
Wiesbaden
Biebrich
Rüdesheim
Bingerbrück
Kreuznach
Mainz
Mayence
Wurtemberg
Stuttgart
Ludwigsburg
Esslingen
Cannstatt
Gmünd
Aalen
Heidenheim
Hall
Crailsheim
Mergentheim
Bruchsal
Karlsruhe
Rastadt
Baden
Ettlingen
Pforzheim
Durlach
Maxau
Speyer
Heidelberg
Mannheim
Ludwigshafen
Neustadt
Kaiserslautern
Zweibrücken
Landau
Alzey
Worms
Darmstadt
Aschaffenburg
Hanau
Frankfort
Offenbach
Hochheim
Wiesbaden
Biebrich
Rüdesheim
Bingerbrück
Kreuznach
Mainz
Mayence
Bavaria
Munich
(München)
Augsburg
Ingolstadt
Landshut
Moosberg
Freising
Erding
Muhldorf
Poking
Hohenlinden
Rosenheim
Holz
Tegern
Traunstein
Reichenhall
Salzburg
Kufstein
Watzmann
Zugspitze
Partenkirchen
Oberammergau
Füssen
Kempten
Memmingen
Landsberg
Ulm
New Ulm
Donauwörth
Neuburg
Regensburg
Straubing
Deggendorf
Passau
Landau
Dingolfing
Landshut
Moosberg
Freising
Erding
Muhldorf
Poking
Hohenlinden
Munich
Rosenheim
Holz
Tegern
Traunstein
Reichenhall
Salzburg
Kufstein
Watzmann
Zugspitze
Partenkirchen
Oberammergau
Füssen
Kempten
Memmingen
Landsberg
Ulm
New Ulm
Donauwörth
Neuburg
Regensburg
Straubing
Deggendorf
Passau
Landau
Dingolfing
Switzerland
Basel
Constance
Lake of Constance
Schaffhausen
Waldshut
Stockach
Ueberlingen
Ravensburg
Friedrichshafen
Lindau
Isny
Kempten
Füssen
Oberammergau
Partenkirchen
Zugspitze
Watzmann
Kufstein
Salzburg
Reichenhall
Traunstein
Rosenheim
Holz
Tegern
Munich
Hohenlinden
Poking
Muhldorf
Erding
Freising
Landshut
Moosberg
Dingolfing
Landau
Passau
Deggendorf
Straubing
Regensburg
Donauwörth
Neuburg
Ingolstadt
Augsburg
Ulm
New Ulm
Memmingen
Landsberg
Ulm
New Ulm
Donauwörth
Neuburg
Regensburg
Straubing
Deggendorf
Passau
Landau
Dingolfing
Landshut
Moosberg
Freising
Erding
Muhldorf
Poking
Hohenlinden
Munich
Rosenheim
Holz
Tegern
Traunstein
Reichenhall
Salzburg
Kufstein
Watzmann
Zugspitze
Partenkirchen
Oberammergau
Füssen
Kempten

BALTIC SEA
Königsberg
Pregel R.
Gulf of Danzig
Pillau
Hela
Danzig
Weichselmünde
Frische Nehrung
Frisches Haff
Elbing
EAST PRUSSIA
Marienburg
Pr. Holland
Allenstein
Osterode
Ortelsburg
Neidenburg
Lötzen
Oletzko
Lyck
Johannisburg
Rastenburg
Angerburg
Goldap
Insterburg
Tilsit
Memel R. or Niemen
Memel
Libau
Windau
Courland
Mitau
Riga
Gulf of Riga
Dünaburg
Vilna
Grodno
Bialystok
Brest-Litovsk
Pinsk
Kovel
Rovno
Tarnopol
Volhynia
Podolia
Kiev
Dnieper R.
Pripet R.
Pripet Marshes
Minsk
Mogilev
Smolensk
Orsha
Vitebsk
Dvina R.
Pskov
Lake Peipus
Narva
Gulf of Finland
Reval
Hapsal
Baltic Provinces
Livonia
Esthonia
Dorpat
Pernau
Arensburg
Moon I.
Dagö I.
Oesel I.
Rugen I.
C. Arcona
Zingst I.
Darsser Ort
Stolpmünde
Rügenwalde
Stolp
Leba
Rutzig
Lauenburg
Lupow R.
Stolpe R.
Neustadt
Neufahrwasser
Schlawe
Kolberg
Köslin
Butow
Lupow L.
Lebrent
Dirschau
Vistula R.
Nogat
Marienburg
Pomerania
Pomeranian Bay
Usedom
Wollin
Swine R.
Swine Gross Haff
Swine Kleines Haff
Stettin Lagoon
Stettin
Greifswald
Wieck
Ryck R.
Stralsund
Tribsees
Trebtow
Demmin
Tollense R.
Tollense L.
Greifenberg
Belgard
Bublitz
Rega R.
Persante R.
Gummelsburg
Stargard
Schlochau
Neustettin
Rummelsburg
Brahe R.
Brahe Kanal
Bromberg Canal
Marienwerder
Graudenz
Kulm
Strasburg
Gollub
Rosenberg
Geserich See
Deutsch Eylau
Lobau
Soldau
Illowa
Neidenburg
Ortelsburg
Allenstein
Osterode
Deutsch Krone
Flatow
Krone
Nakel
Netze R.
Drewenz R.
Thorn
Ottlotschin
Alexandrovo
Plock
Vistula R.
Warsaw
Pilica R.
Sciernlewice
Lodz
Kalisz
Ostrowo
Krotoschin
Jarotschin
Pleschen
Prosna R.
Warta R.
Wreschen
Strazalkowo
Gnesen
Inowrazlaw
Kruschwitz
Obornik
Wronke
Samter
Warthe R.
Netze R.
Schwerin
Birnbaum
Posen
Wollstein
Schrimm
Bentschen
Obra R.
Grätz
Fraustadt
Lissa
Kroben
Rawitsch
Glogau
Sprottau
Steinau
Wohlau
Bartsch R.
Trebnitz
Kempen
Sibyllenort
Oels
Wilhelmsbruck
Namslau
Kreutzburg
Oder R.
Breslau
Liegnitz
Jauer
Lauban
Bunzlau
Görlitz
Lohau
Bautzen
Grossenhain
Riesa
Dobeln
Meissen
Dresden
Pirna
Königstein
Freiberg
Zittau
Reichenberg
Leitmeritz
Elbe R.
Eger R.
Saxony
Silesia
Hirschberg
Landeshut
Schweidnitz
Zobten
Brieg
Reichenbach
Waldenburg
Langenbielau
Neisse
Neisse R.
Glatz
Adler R.
Sudetes Mts.
Altwater
Neustadt
Oppeln
Rosenberg
Lublinitz
Herby
Tarnowitz
Beuthen
Königshütte
Kosel
Gleiwitz
Kattowitz
Leobschütz
Rybnik
Ratibor
Krakow
Troppau
Moravia
March R.
Oder R.
Austria-Hungary
Bohemia
Prague
Pilsen
Bavaria
Regen
Deggendorf
Freyung
Passau
Poking
Danube R.
Bohemian Forest
Saale R.
Elster R.
Spree R.
Spree Wald
Berlin
Brandenburg
Potsdam
Spandau
Nauen
Hoppegarten
Kustrin
Warthe R.
Oder R.
Frankfurt
Kunersdorf
Müncheberg
Gross Beeren
Zossen
Luckenwalde
Jüterbog
Dahme R.
Lubben
Luckau
Kottbus
Guben
Grunberg
Sommerfeld
Neusalz
Forst
Sorau
Sagan
Muskau
Spremberg
Torgau
Falkenberg
Mühlberg
Elster R.
Schwarze Elster R.
Neisse R.
Queis R.
Bober R.
Lausitzer Neisse R.
Mecklenburg
Neu Strelitz
Strelitz
Fürstenberg
Templin
Prenzlau
Gartz
Pyritz
Schwedt
Greifenhagen
Angermünde
Ueckermünde
Friedland
Pasewalk
Stargard
Demmin
Tollense R.
Tollense L.
Trebtow
Greifenberg
Gollnow
Gollnow R.
Regalia R.
Rega R.
Persante R.
Belgard
Bublitz
Rummelsburg
Stargard
Schlochau
Neustettin
Dramburg
Templin
Freienwalde
Arnswalde
Schneidemühl
Kallies
Deutsch Krone
Flatow
Krone
Nakel
Netze R.
Bromberg Canal

SWEDEN
GOVERNMENTS
1 Blekinge ..... J 8
2 Christianstad. H 8
3 Elfsborg ..... H 7
4 Gefleborg ..... K 6
5 Gotland ..... L 8
6 Gottenborg och Bohus ..... G 7
7 Halland ..... H 8
8 Jemtland ..... J 5
9 Jonkoping ..... J 8
10 Kalmar ..... K 8
11 Kopparberg ... J 6
12 Kronoberg ..... J 8
13 Malmohus .... H 9
14 Norrbotten .... L 3
15 Orebro ..... J 7
16 Oster Gotland . J 7
17 Skaraborg ..... H 7
18 Sodermanland K 7
19 Stockholm .... L 7
20 Stockholm (City) L 7
21 Upsala ..... K 6
22 Wermland .... H 7
23 Westerbotten. K 4
24 Westernorrland K 5
25 Westmanland K 7
NORWAY
DISTRICTS
1 Akershus ..... G 6
2 Bergen ..... D 6
3 Bratsberg ..... F 7
4 Buskerud ..... F 6
5 Christiania .... G 7
6 Christians .... F 6
7 Finmarken ... P 1
8 Hedemarken . G 6
9 Jarlsberg og Larvik ..... G 7
10 Lister og Mandal E 7
11 Nedenes ..... E 7
12 Nordland ..... J 3
13 Nordre Bergenhus .. E 6
14 Nordre Trondhjem. H 4
15 Romsdal ..... E 5
16 Smaalenene ... G 7
17 Sondre Bergenhus .. E 6
18 Sondre Trondhjem. G 5
19 Stavanger ..... E 7
20 Tromso ..... M 2
SWEDEN, NORWAY AND DENMARK
SCALE OF MILES
0 20 40 60 80 100 120
Railroads
Canals
Size of type indicates relative importance of places
ARCTIC OCEAN
ATLANTIC OCEAN
NORTH SEA
SKAGERRACK
KATTEGAT
BALTIC SEA
GULF OF BOTHNIA
GULF OF FINLAND
GULF OF RIGA
LAPLAND
NORRLAND
SVEALAND
GOTLAND
STOCKHOLM
CHRISTIANIA
BERGEN
TRONDHJEM
ARCTIC CIRCLE
C.S. HAMMOND & CO., N.Y.
2° A 0° B 2° C 4° D 6° E 8° F 10° G 12° H 14° J 16° K 18° L 20° M 22° N 24° O 26° P 28° Q 30° R
D 6° E 8° F 10° G 12° Long H Rude 14° East J from 16° Green K wich 18° L 20° M 22° N 24° O


NETHERLANDS
AND
BELGIUM
SCALE OF MILES
0 10 20 30 40 50
Railroads,
Canals,
Size of type indicates relative importance of places.
NETHERLANDS
PROVINCES
1 Drenthe.....J 2
2 Friesland...G 1
3 Gelderland.H 3
4 Groningen..J 1
5 Limburg....G 5
6 N. Brabant.F 4
7 N. Holland..E 3
8 Overyssel...J 3
9 S. Holland..E 4
10 Utrecht.....F 3
11 Zeeland.....C 5
BELGIUM
PROVINCES
1 Antwerp....E 5
2 Brabant.....E 6
3 E. Flanders.C 6
4 Hainaut....C 6
5 Liege.....G 6
6 Limburg....F 5
7 Luxemburg F 8
8 Namur.....E 7
9 W. Flanders B 6
NORTH SEA
ZUIDER ZEE
AMSTERDAM
ROTTERDAM
HAGUE
UTRECHT
ANTWERP
BRUSSELS
LUXEMBURG
Hook of Holland
North Sea Canal
Oude Rijn R. (Old Rhine)
Maasdiep
Oosterschelde
Oosterschelde
Hond or West Schelde
Oude Schelde
Oude Maas
Lek R.
Waal R.
Rhine
Meuse R.
Sambre R.
Oise R.
Aisne R.
Somme R.
Moselle R.
Ourthe R.
Lys R.
Scheldt R.
Dender R.
Dyle R.
Nethe R.
Demer R.
Escaut
Canal de Mons à Condé
Canal de Charleroi
Canal de la Sambre à l'Oise
Canal de Pommerœul à Antoing
Canal de Nimy à Blaton
Canal de Roubaix
Canal de la Deûle
Canal de Neufossé
Canal de Bossuyt à Courtrai
Canal de Gand à Bruges
Canal de Terneuzen
Canal de Gand à Terneuzen
Canal de Zuid Willemsvaart
Canal de Meuse et Moselle
Canal de la Meuse à la Sambre
Canal de Dérivation de la Lys
Canal de Bruxelles à Charleroi
Canal de Bruxelles à Rupel
Canal de Willebroek
Canal de Louvain à la Dyle
Canal de Bruxelles à Termonde
Canal de Schipdonk
Canal de Zuid Beveland
Canal de Walcheren
Canal de Middelburg à Vlissingen
Canal de Gand à Ostende
Canal de Bruges à Ostende
Canal de Bruges à Zeebrugge
Canal de Plassendale à Nieuport
Canal de Furnes à Dunkerque
Canal de Dixmude à la Mer
Canal de Schipdonk
Canal de Zuid Beveland
Canal de Walcheren
Canal de Middelburg à Vlissingen
Canal de Gand à Ostende
Canal de Bruges à Ostende
Canal de Bruges à Zeebrugge
Canal de Plassendale à Nieuport
Canal de Furnes à Dunkerque
Canal de Dixmude à la Mer
C.S. HAMMOND & CO. N.Y.


FRANCE
SCALE OF MILES
0 20 40 60 80 100 120
Railroads
Canals
Size of type indicates relative importance of places
FRANCE
— DEPARTMENTS
1 Ain ... F3
2 Aisne ... E2
3 Allier ... E3
4 Alpes Maritimes ... G5
5 Ardèche ... F4
6 Ardennes ... E2
7 Ariège ... G3
8 Aube ... F2
9 Aude ... G5
10 Aveyron ... F4
11 Basses Alpes ... F4
12 Basses Pyrenées ... C5
13 Bouches du Rhone ... F5
14 Calvados ... C2
15 Cantal ... F4
16 Charente ... D4
17 Charente Inferieure ... C4
18 Cher ... E3
19 Corrèze ... D4
20 Corse (Corsica) ... N5
21 Cote d'Or ... F3
22 Cotes du Nord ... B2
23 Creuse ... E3
24 Deux Sevres ... C3
25 Dordogne ... D4
26 Doubs ... G3
27 Drome ... F4
28 Eure ... E2
29 Eure et Loir ... D2
30 Finistere ... A2
31 Gard ... F4
32 Gers ... D5
33 Garonne ... C4
34 Haute Garonne ... D5
35 Haute Loire ... E4
36 Haute Marne ... F2
37 Hautes Alpes ... G4
38 Haute Saone ... G3
39 Haute Savoie ... G3
40 Hautes Pyrenees ... D5
41 Haute Vienne ... D4
42 Haut Rhin ... G3
43 Herault ... E5
44 Ille et Vilaine ... C2
45 Indre ... E3
46 Indre et Loire ... D3
47 Isere ... F4
48 Jura ... G3
49 Landes ... C4
50 Loire ... F4
51 Loire Inferieure ... C3
52 Loiret ... E3
53 Loir et Cher ... D3
54 Lot ... D4
55 Lot et Garonne ... D4
56 Lozere ... F4
57 Maine et Loire ... C3
58 Manche ... C2
59 Marne ... F2
60 Mayenne ... C2
61 Meurthe et Moselle ... G2
62 Meuse ... F2
63 Morbihan ... B3
64 Nievre ... E3
65 Nord ... E1
66 Oise ... E2
67 Orne ... C2
68 Pas de Calais ... E1
69 Puy de Dome ... E4
70 Pyrenees Orientales ... E5
71 Rhone ... F4
72 Saone et Loire ... F3
73 Sarthe ... D2
74 Savoie ... G4
75 Seine ... E2
76 Seine et Marne ... E2
77 Seine et Oise ... E2
78 Seine Inferieure ... D2
79 Somme ... E2
80 Tarn ... E5
81 Tarn et Garonne ... D5
82 Var ... G5
83 Vaucluse ... F4
84 Vendee ... C3
85 Vienne ... D3
86 Vosges ... G2
87 Yonne ... E3
ENGLISH CHANNEL
ATLANTIC OCEAN
BAY OF BISCAY
MEDITERRANEAN SEA
GULF OF THE LION
BRUSSELS
BERN
SWITZERLAND
ITALY
SPAIN
CORSICA
C.S.HAMMOND & CO., N.Y.
A 4° Longitude B West from 2° Greenwich C 0° Longitude D
4° East from F Greenwich 6° G 8°

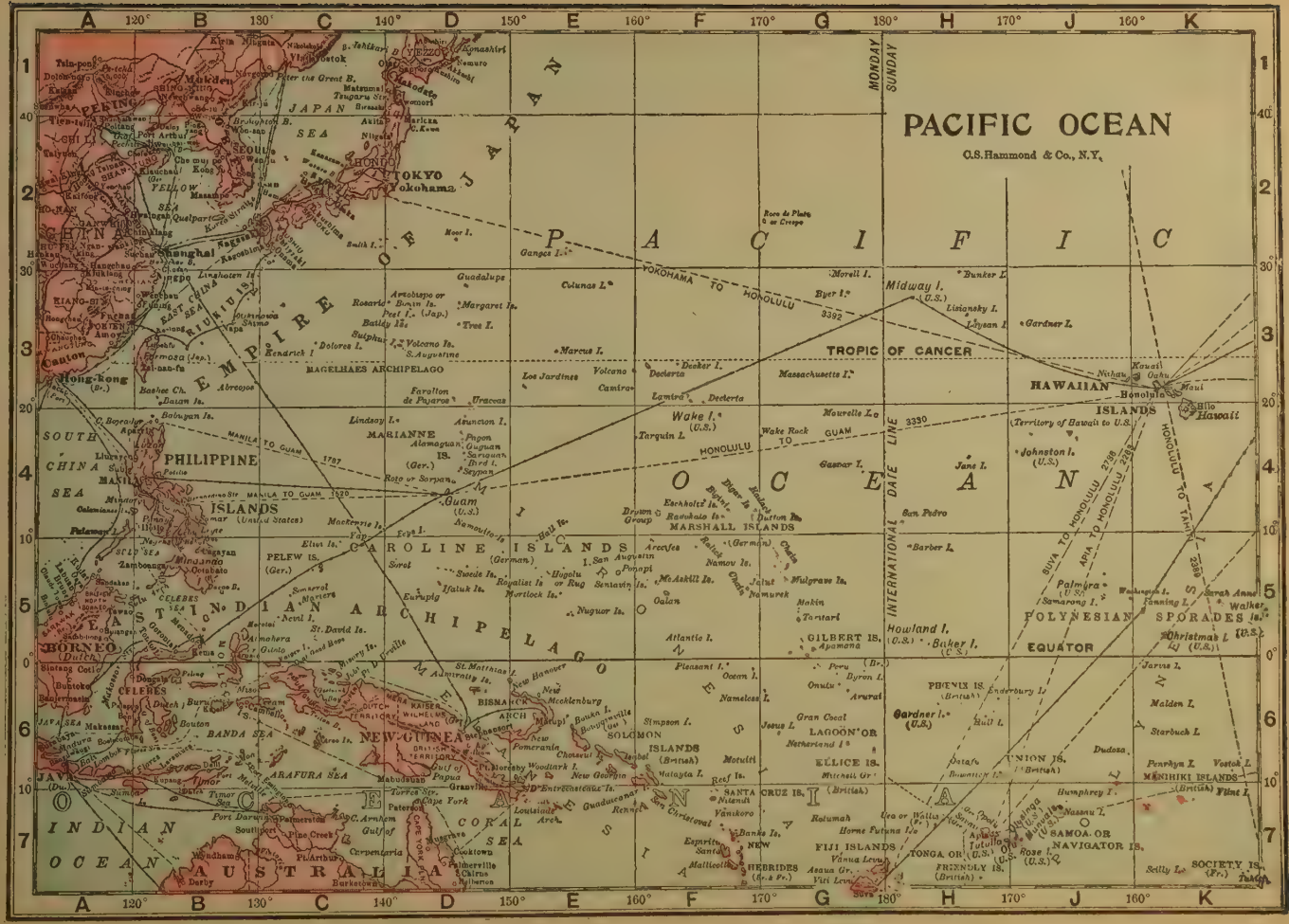
SPAIN AND PORTUGAL
SCALE OF MILES
0 20 40 60 80
Railroads,
Canals,
BAY OF BISCAY
FRANCE
ATLANTIC OCEAN
MEDITERRANEAN SEA
BALEARIC ISLANDS
GULF OF VALENCIA
GULF OF CADIZ
STRAIT OF GIBRALTAR
ALBORAN I.
AFRICA (Sp.)
OLD CASTILE
NEW CASTILE
ESTREMADURA
MURCIA
MADRID
BARCELONA
MINORCA
MAJORCA
CABRERA
IVIZA
FORMENTERA
PITHYUSÆ
ISLES.
Toulouse
Narbonne
Perpignan
Bayonne
Pau
Lourdes
Tarbes
Andorra
Bilbao
Santander
Oviedo
Leon
Burgos
Valladolid
Zamora
Salamanca
Coimbra
Lisbon
Evora
Badajoz
Merida
Caceres
Toledo
Madrid
Guadalajara
Cuenca
Albacete
Ciudad Real
Jaen
Cordova
Seville
Granada
Malaga
Almeria
Murcia
Valencia
Alicante
Cartagena
Tarragona
Lerida
Huesca
Zaragoza
Logrono
Pamplona
San Sebastian
Tortosa
Castellon de la Plana
Gibraltar (Br.)
Ceuta
Tangier
Tarifa
Algeciras
Cape St. Vincent
Cape Finisterre
Cape Ortegal
Cape Prior
Cape Villano
Cape Torinana
Cape Corrubedo
Cape Mondego
Cape Roca
Cape Espichel
Cape Sines
Cape St. Martinho
Cape Carvoeiro
Cape Tortosa
Cape Nao
Cape de Palos
Mar Menor
Cape Gata
Cape Carbon
Cape Trafalgar
Cape Spartel
Strait of Gibraltar
Almina Pt.
(To Spain)
Oporto
Villa Nova de Gaya
Braga
Chaves
Braganca
Guimaraes
Villa do Conde
Aveiro
Vizeu
Coimbra
Figueira
Leiria
Santarem
Lisbon
Setubal
Evora
Beja
Ourique
Villa Nova de Milfontes
Sagres
Portalegre
Castello Branco
Abrantes
Thomar
Alcantara
Badajoz
Olivenza
Elvas
Estremoz
Portalegre
Almeida
Ciudad Rodrigo
Salamanca
Zamora
Toro
Tordesillas
Valladolid
Palencia
Burgos
Miranda
Vitoria
Logrono
Haro
Calahorra
Tudela
Estella
Pamplona
Sanguesa
Jaca
Huesca
Barbastro
Monzon
Lerida
Balaguer
Cervera
Tarragona
Reus
Tortosa
Morella
Vinaroz
Peniscola
Castellon de la Plana
Murviedro
Valencia
Alcira
Xativa
Gandia
Denia
Javea
Alcoy
Villena
Elche
Orihuela
Alicante
Villajoyosa
Torrevieja
Murcia
Lorca
Totana
Mula
Caravaca
Cieza
Hellin
Albacete
Chinchilla
Almansa
Requena
Utiel
Chelva
Segorbe
Castellon de la Plana
Vinaroz
Morella
Tortosa
Gerona
Olot
Vich
Manresa
Igualada
Villafranca
Barcelona
Mataro
Arenys
Palamos
Figueras
Rosas
Puycerda
Seo de Urgel
Tremp
Balaguer
Lerida
Cervera
Tarrega
Reus
Tarragona
Montblanch
Valls
Falset
Gandesa

ITALY
Scale of Miles
0 10 20 30 40 50 100
Railroads
Size of type indicates relative importance of places
The Kingdom of Italy is divided into 69 Provinces, of which boundaries are shown and capitals of same are designated thus; ⊙ the name of Province is in all cases the same as capital town. The larger divisions, known as Compartimenti are not now recognized as legal divisions.
SWITZERLAND
AUSTRIA-HUNGARY
FRANCE
TYRRHENIAN SEA
ADRIATIC SEA
IONIAN SEA
MEDITERRANEAN SEA
MALTA CHANNEL
AFRICA
TUNIS
ZURICH
MILAN
TURIN
GENOA
FLORENCE
ROME
NAPLES
PALERMO
MALTA (British)
C.S. HAMMOND & CO., N.Y.

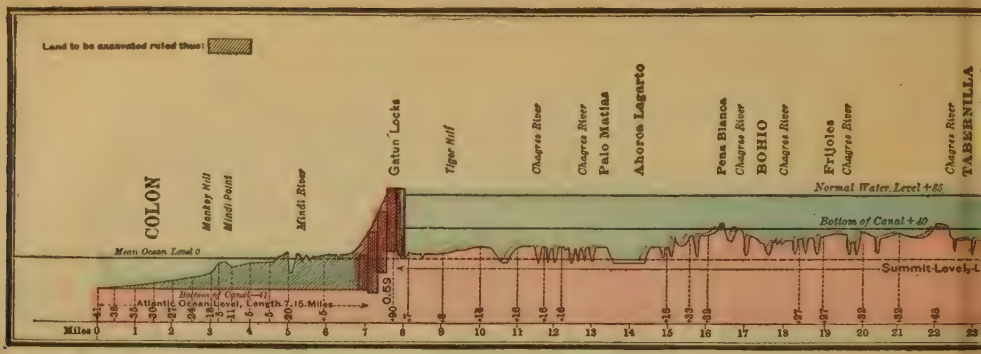
RUSSIA IN EUROPE AND CAUCASIA
PROVINCES
1 Archangel ... B 3
2 Astrakhan ... J 6
3 Baku (Trans Caucasia) ... J 7
4 Bessarabia ... E 6
5 Black Sea (Trans Caucasia) ... G 7
6 Chernigof ... F 5
7 Cherson ... E 6
8 Courland ... D 4
9 Daghestan (Trans Caucasia) ... J 7
10 Don Cossacks, Provinces of the ... H 6
11 Ekaterinoslaf ... G 6
12 Elizavetpol (Trans Caucasia) ... J 8
13 Erivan (Trans Caucasia) ... H 8
14 Esthonia ... E 4
15 Grodno ... D 5
16 Kaluga ... G 5
PROVINCES (Continued)
17 Kars (Trans Caucasia) ... H 7
18 Kazan ... J 4
19 Kharkof ... G 6
20 Kief ... F 6
21 Kostroma ... H 4
22 Kovno ... D 4
23 Kuban (Northern Caucasia) ... G 8
24 Kursk ... G 6
25 Kutais (Trans Caucasia) ... H 7
26 Livonia ... E 4
27 Minsk ... E 5
28 Mohilef ... F 5
29 Moscow ... G 4
30 Nishni Novgorod ... H 4
31 Novgorod ... E 4
32 Olonetz ... D 3
33 Orel ... G 5
34 Orenburg ... L 5
35 Penza ... K 5
36 Perm ... L 4
37 Podolia ... F 6
38 Poltava ... F 6
39 Pskof ... E 4
40 Ryazan ... H 5
41 Saint Petersburg ... E 4
42 Samara ... K 5
43 Saratof ... H 6
44 S'mtnisk ... J 5
45 Smolensk ... F 4
46 Stavropol (Northern Caucasia) ... H 6
47 Tambof ... H 5
48 Taurida ... F 6
49 Terek (Northern Caucasia) ... H 7
50 Tiflis (Trans Caucasia) ... H 7
51 Tula ... G 5
52 Tver ... G 4
53 Ufa ... L 4
54 Viatka ... K 4
55 Vilna ... E 5
56 Vitebsk ... E 4
57 Vladimir ... H 4
58 Volhynia ... E 6
59 Vologda ... J 3
60 Voronezh ... G 6
61 Yaroslaf ... G 4
ARCTIC OCEAN
KARA SEA
NOVA ZEMLA
YALMAL PENINSULA
Gulf of Ob
Barents Sea
North Cape
Hammerfest
Spitzbergen
Bear I.
Molter B.
Black C.
Burrough or Kara Straits
VAIGACH I.
Karg Bay
Kanin Noss
KANIN PEN.
Cheshskaya Bay
KOLGUEV I.
Pechora R.
Ob R.
Obskaya
WESTERN SIBERIA
Enara L.
Enara
Sogela
Kittila
Kemitrask
Kandalaksha
KOLA PENINSULA
ARCTIC CIRCLE
Pustozersk
Mezen
Safonova
Ust Tsylma
Koshva
Petchora R.
Onega
Dwina R.
Archangel
Cholmogory
Troitzkoye
Yarensk
Kotlas
Kasimof
Kerchem
Cherdyn
Dedlichin
Obvinsk
Nizhni Tagilsk
Perm
Ekaterinburg
Artynsk
Ostrovskaya
Votkinsk
Izhev
Sarapul
Kama R.
Slatoust
Chelyabinsk
Miyass
Troitsk
Ufa
Sterlitamak
Kungur
Orenburg
Orskaia
Ural R.
Chistopol
Buguslan
Simbirsk
Kazan
Samara
Syzran
Penza
Kuznetzk
Volsk
Balakovo
Saratof
Pokrovsk
Yeshof
Atkarsk
Tambof
Borisoglebsk
Lipetzk
Voronezh
Kozlof
Orel
Jeletz
Kursk
Bielgorod
Kharkof
Waluiki
Kupiansk
Lozovaya
Poltava
Krementchug
Kremenetz
Dubno
Rovno
Zhitomir
Kief
Tchernigof
Gomel
Orsha
Mohilef
Roslavl
Smolensk
Viasma
Vitebsk
Minsk
Bobruisk
Pinsk
Brest Litovsk
Lodz
Warsaw
Ivangorod
Radom
Lublin
Kholm
Grodno
Vilna
Kovno
Mitau
Libau
Memel
Riga
Pskof
Narvia
Russa
Ostashkof
Rshev
Tver
Yaroslaf
Rybinsk
Kostroma
Galitch
Volga R.
Vetluga
Ivanovo
Shuia
Kovrof
Vladimir
Nizhnei Novgorod
Kasan
Kolomna
Moscow
Riazan
Tula
Riashk
Mozhansk
Serpukhof
Kaluga
Mohilef
Roslavl
Smolensk
Viasma
Vitebsk
Minsk
Bobruisk
Pinsk
Brest Litovsk
Lodz
Warsaw
Ivangorod
Radom
Lublin
Kholm
Grodno
Vilna
Kovno
Mitau
Libau
Memel
Riga
Pskof
Narvia
Russa
Ostashkof
Rshev
Tver
Yaroslaf
Rybinsk
Kostroma
Galitch
Volga R.
Vetluga
Ivanovo
Shuia
Kovrof
Vladimir
Nizhnei Novgorod
Kasan
Kolomna
Moscow
Riazan
Tula
Riashk
Mozhansk
Serpukhof
Kaluga
Gulf of Finland
Helsingfors
Abo
Wiborg
Lake Ladoga
Lake Onega
Petrozavodsk
Olonetz
Vytegra
Lake Kem
Kemi
Uleaborg
Tornea
Kajana
Lake Kajana
Gulf of Bothnia
FINLAND
Aland Is.
Stockholm
Gulf of Bothnia
Sweden
Norway
Gothland
Oselo
Baltic Sea
Dagoe I.
Reval
Pernau
Arensburg
Windau
Libau
Memel
Mitau
Riga
Pskof
Narvia
Russa
Ostashkof
Rshev
Tver
Yaroslaf
Rybinsk
Kostroma
Galitch
Volga R.
Vetluga
Ivanovo
Shuia
Kovrof
Vladimir
Nizhnei Novgorod
Kasan
Kolomna
Moscow
Riazan
Tula
Riashk
Mozhansk
Serpukhof
Kaluga
ST-PETERSBURG
Nikolsk
Vologda
Totma
Velsk
Onega
Lake Onega
Petrozavodsk
Olonetz
Vytegra
Lake Ladoga
Lake Kem
Kemi
Uleaborg
Tornea
Kajana
Lake Kajana
Gulf of Bothnia
FINLAND
Aland Is.
Stockholm
Gulf of Finland
Helsingfors
Abo
Wiborg
Lake Ladoga
Lake Onega
Petrozavodsk
Olonetz
Vytegra

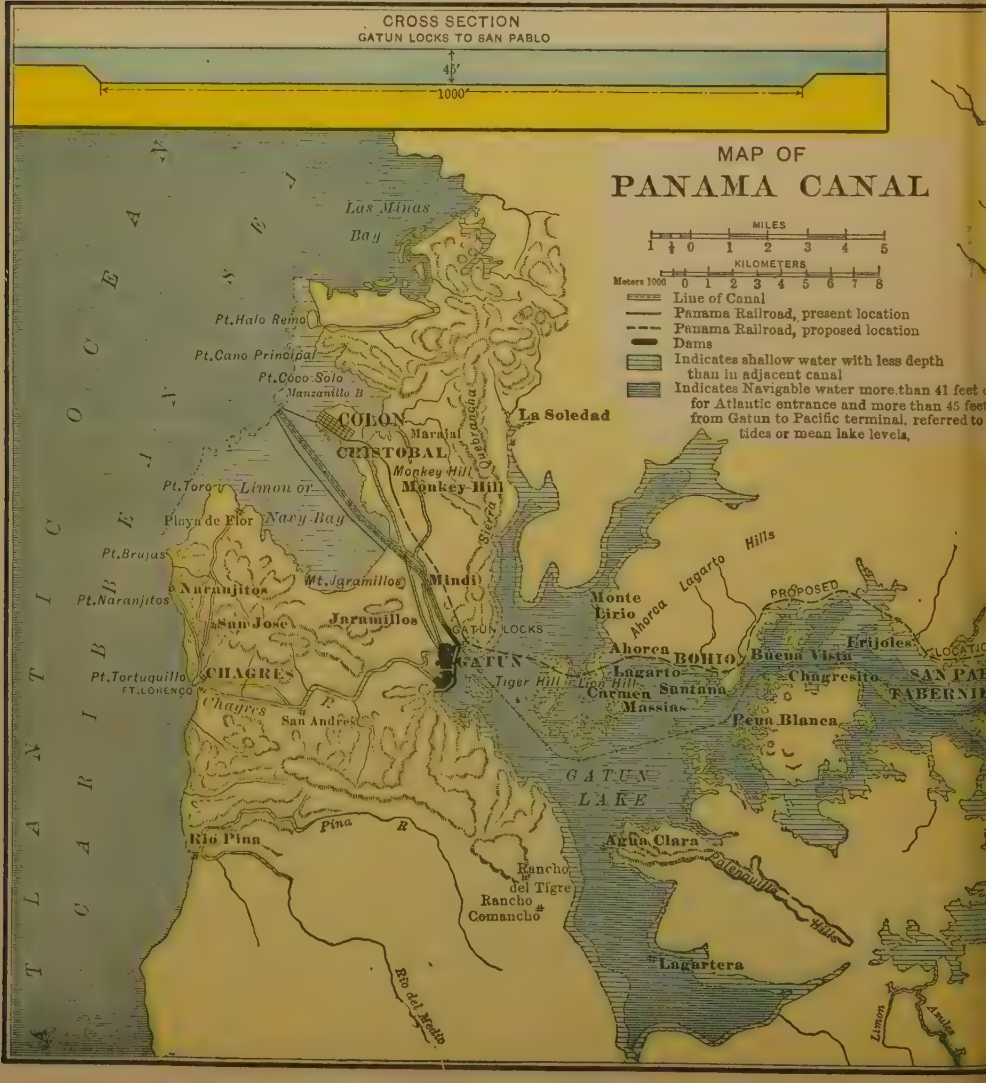
ASIA
Scale of Miles
0 200 400 600 800
Important towns are shown in heavy face type
EUROPEAN RUSSIA
ASIATIC RUSSIA
CHINA
EMPIRE
JAPAN
EMPIRE
PERSIA
ARABIA
INDIA
FARTHER INDIA
PHILIPPINE ISLANDS
PACIFIC OCEAN
INDIAN OCEAN
ARCTIC OCEAN
ATLANTIC OCEAN
BLACK SEA
CASPIAN SEA
MEDITERRANEAN SEA
RED SEA
ARABIAN SEA
BAY OF BENGAL
SEA OF JAPAN
YELLOW SEA
EAST CHINA SEA
SOUTH CHINA SEA
Longitude East from Greenwich
Longitude West from Greenwich
EQUATOR
TROPIC OF CANCER
ARCTIC CIRCLE

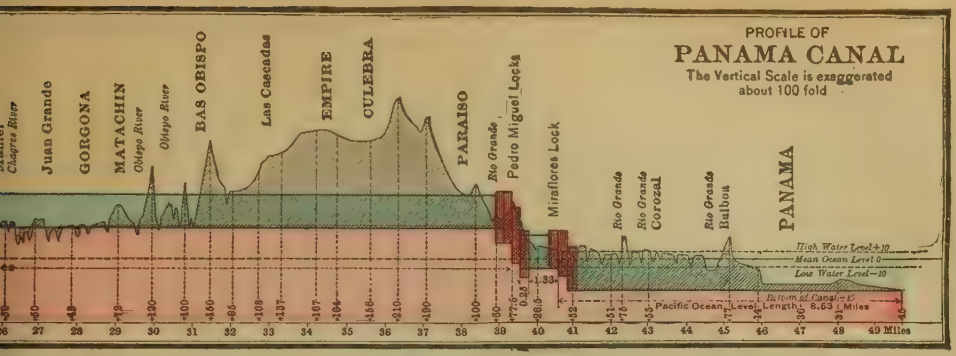
MODERN
PALESTINE
SCALE OF MILES
0 5 10 20 30
Railroads
Biblical names are in parentheses (Bethlehem) (R. Jordan)
Size of type indicates relative importance of places
BEIRUT
DIMESHK ESH SHAM (Damascus)
Saida
Es Sur (Tyre)
Acre, Akka (Acho)
Kaisareh (Cæsarea)
Yafa (Joppa)
Askalan
Ghuzzeh (Gaza)
EL KUDS (Jerusalem)
NABLUS
EL BELK
EL HAURAN
MEDITERRANEAN SEA
DEAD SEA
Nahr el Kasimiyeh (Kishon)
Nahr Sukereir
Nahr Rubin
Wady el Kelt
Wady Sherah
Wady el Ahsy
Wady el Jeib
Wady el Kurn
Wady el Zerka
Wady Yabis
Wady Nimrin
Wady Hesbon
Wady Arab
Wady Zerka
Wady el Hesy
Wady Ghuzzeh
Jebel Esh Sheikh (Mount Hermon)
Jebel Gilead
Jebel Jidy
Jebel Usdum
Ras En Nakurah
Bay of Acre
Bahr Tubariya (Sea of Galilee)
Bahr Lut (Dead Sea)
Jordan
Longitude East 35° 30' from Greenwich
EXPLANATION OF COLORING
Above 6000 feet
Level of Mediterranean Sea
Level of Dead Sea
Feet
6000
3000
1500
500
0
1292
DEPRESSION

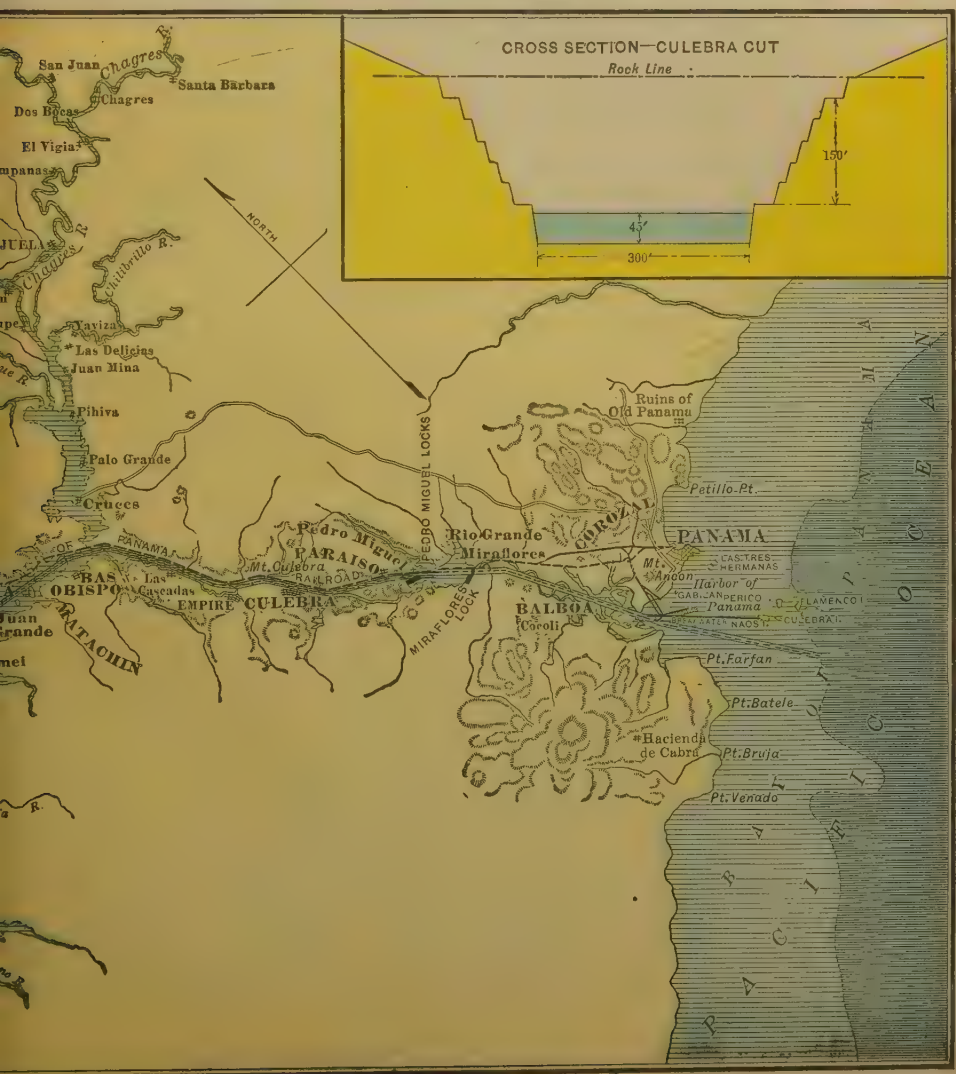

PACIFIC OCEAN
C.S. Hammond & Co., N.Y.
PACIFIC
OCEAN
INDIAN
OCEAN
AUSTRALIA
JAPAN
SEA
CHINA
SEA
PHILIPPINE
ISLANDS
EMPIRE OF JAPAN
TOKYO
Yokohama
PEKING
SEOUL
Shanghai
Hongkong
Canton
Manila
Guam
(U.S.)
Wake I.
(U.S.)
Midway I.
(U.S.)
HAWAIIAN
ISLANDS
(Territory of Hawaii to U.S.)
Honolulu
Hilo
Hawaii
Johnston I.
(U.S.)
Palmyra
(U.S.)
Howland I.
(U.S.)
Baker I.
(U.S.)
Gardner I.
(U.S.)
Christmas I.
(U.S.)
TROPIC OF CANCER
EQUATOR
INTERNATIONAL DATE LINE
YOKOHAMA TO HONOLULU 3392
MANILA TO GUAM 1597
MANILA TO GUAM 3320
HONOLULU TO SUVA 2788
HONOLULU TO APIA 2485
HONOLULU TO TAHITI 2550
MONDAY
SUNDAY
MARIANNE ISLANDS
CAROLINE ISLANDS
MARSHALL ISLANDS
GILBERT IS.
ELLICE IS.
SOLOMON ISLANDS
NEW GUINEA
BISMARCK ARCHIPELAGO
BORNEO
CELEBES
MOLUCCAS
SUNDA ISLANDS
LAGOON OR
NETHERLAND I.
PHOENIX IS.
(British)
UNION IS.
(British)
SAMOA OR
NAVIGATOR IS.
(U.S.)
TONGA OR
FRIENDLY IS.
(British)
FIJI ISLANDS
NEW HEBRIDES
(Fr. & Br.)
SANTA CRUZ IS.
(British)
POLYNESIAN
SPORADES
MENHIKI ISLANDS
(British)
SOCIETY IS.
(Fr.)
CORAL SEA
BANDA SEA
ARAFURA SEA
TIMOR SEA
JAVA SEA
SULU SEA
CELEBES SEA
SOUTH CHINA SEA
EAST CHINA SEA
YELLOW SEA
JAPAN SEA
Guadalupe
Columbus I.
Morell I.
Bunker I.
Byer I.
Lisianesky I.
Gardner I.
Nihau
Kauai
Oahu
Maui
Marcus I.
Los Jardines
Volcano
Camiras
Declerta
Becker I.
Massachusetts I.
Lamotrek
Wake Rock
Nouvelle Lo
Gaspar I.
Jane I.
San Pedro
Barber I.
Eschholtz Is.
Bigelow
Dickson Is.
Dutton Is.
Bryon Group
Radack Is.
Arrecifes
Ralick Chain
(German)
Namov Is.
Jaluit
Mulgrave Is.
Makin
Tarawa
Apamama
Pleasant I.
Ocean I.
Nameless I.
Peru
Byron I.
Onuto
Arurut
Jarvis I.
Malden I.
Starbuck I.
Penrhyn I.
Vostok I.
Flint I.
Humphrey I.
Nassau I.
Dudoso
Suwarrow I.
Rennell I.
Bellona I.
Savage I.
Niulakita
Nukufetau
Funafuti
Nanomea
Nanomaga
Niutao
Nui
Vaitupu
Nukulaelae
Rose I.
(U.S.)
Scilly I.
Tahiti
Moorea
Papeete
Tutuila
Apia
Upolu
Savaii
Vavau
Tongatabu
Nukualofa
Futuna I.
Aneityum
Erromanga
Santo
Malicolo
Vanua Levu
Viti Levu
Rotuma
Horne Futuna Is
Vanikoro
Banks Is.
Espiritu Santo
Aoba
Aurora
Pentecost I.
Mallicolo
Aneiteum
Erromanga
Tanna
Efate
Api
Malekula
Ambrym
Epi
Paama
Lopevi
Ambae
Maewo
Pentecost
Aoba
Malo
Santo
Vanua Lava
Merlav
Gaua
Torres Is.
Aurora
Pentecost
Maewo
Ambae
Ambrym
Epi
Malekula
Paama
Lopevi
Tanna
Aneityum
Erromanga
Efate
Api
Malo
Santo
Vanua Lava
Merlav
Gaua
Torres Is.
Roro de Plata
& or Creepo
Ganges I.
Volcano Is.
S. Augustine
Bonin Is.
Arzobispo or
Parece Vela
Rosario
Margaret Is.
Tree I.
Bulphur I.
Dolores I.
Kendrick I
Formosa (Jap.)
Zai-nan-fu
Basilee Ch.
Batan Is.
Babuyan Is.
Aparri
Lindsay I.
Asuncion I.
Pagon
Alamagan
Guguan
Sarigan
Bird I.
Seymour
Rota or Sorpan
Ste
Mariveles
Corregidor
Cabcaben
Olongapo
Subig
Dingalan B.
Lingayen
Agno
Dagupan
Tarlac
Bataan
Pampanga
Bulacan
Cavite
Batangas
Mindoro
Calamianes
Palawan I.
Balabac I.
Cagayan
Jolo
Zamboanga
Dapitan
Cotabato
Sibuguey B.
Davao B.
Sulu Sea
Sulu Archipelago
Basilan I.
Mindanao
Surigao
Cebu
Negros
Panay
Iloilo
Capiz
Antique
Leyte
Samar
Tacloban
Catbalogan
Calbayog
Ormoc
Bohol
Siquijor
Dumaguete
Oslob
Cebu
Mactan I.
Lapu-Lapu
Opon
Cebu
Bantayan I.
Malapascua I.
Camotes Is.
Poro Pt.
Lingayen G.
Lingayen
Dagupan
Tarlac
Pangasinan
Nueva Ecija
Bataan
Pampanga
Bulacan
Manila

AUSTRALIA
Scale of Miles
0 100 200 400 800
Important towns are shown in heavy face type
WESTERN AUSTRALIA
NORTHERN TERRITORY
SOUTH AUSTRALIA
QUEENSLAND
NEW SOUTH WALES
VICTORIA
TASMANIA
Great Sandy Desert
Great Victoria Desert
Great Australian Bight
GULF OF CARPENTARIA
CORAL SEA
TASMAN SEA
INDIAN OCEAN
PACIFIC OCEAN
Torres Strait
Gulf of Papua
SOLOMON IS.
NEW ZEALAND
Same scale as main map
Launceston
HOBART
TASMAN PEN.
Same scale as main map
Longitude East from Greenwich


Land to be excavated noted thus:
COLON
Monkey Hill
Mindi Point
Mindi River
Gatun Locks
Tiger Hill
Chagres River
Chagres River
Palo Matias
Ahorca Lagarto
Pena Blanca
Chagres River
BOHIO
Chagres River
Frijoles
Chagres River
Chagres River
TABERNILLA
Normal Water Level +85
Bottom of Canal +40
Summit Level +
Mean Ocean Level 0
Bottom of Canal —41
Atlantic Ocean Level, Length 7.15 Miles
0.59
Miles 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23


CROSS SECTION
GATUN LOCKS TO SAN PABLO
45'
1000'
MAP OF
PANAMA CANAL
MILES
1 ½ 0 1 2 3 4 5
KILOMETERS
Meters 1000 0 1 2 3 4 5 6 7 8
Line of Canal
Panama Railroad, present location
Panama Railroad, proposed location
Dams
Indicates shallow water with less depth than in adjacent canal
Indicates Navigable water more than 41 feet
for Atlantic entrance and more than 45 feet
from Gatun to Pacific terminal, referred to
tides or mean lake levels.
Las Minas Bay
Pt. Halo Remo
Pt. Cano Principal
Pt. Coco Solo
Manzanillo B
COLON
Maraial
La Soledad
CRISTOBAL
Monkey Hill
Monkey Hill
Pt. Toro
Limon or
Playa de Flor
Navy Bay
Pt. Brujas
Naranjitos
Pt. Naranjitos
Mt. Jaramillos
Mindi
San Jose
Jaramillos
GATUN LOCKS
GATUN
Tiger Hill
Pt. Tortuquillo
FT. LORENCO
CHAGRES
Chagres R.
San Andres
Monte Lirio
Ahorca
Lagarto Hills
PROPOSED
Ahorca
BOHIO
Lagarto
Carmen
Santana
Massias
Buena Vista
Frijoles
Chagresito
Pena Blanca
GATUN LAKE
Pina R.
Rio Pina
Rancho del Tigre
Rancho Comancho
Agua Clara
Lagartera
Rio del Medio
Limon
Aguila R.
ATLANTIC OCEAN

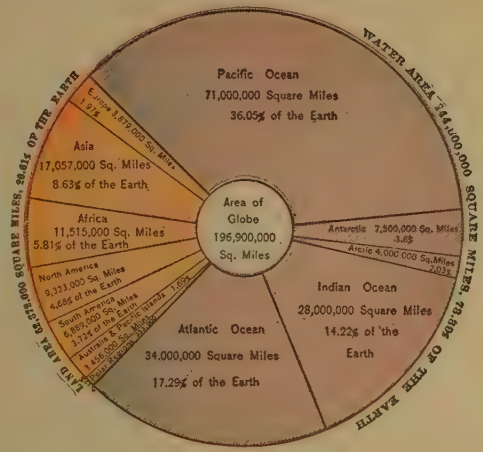

PROFILE OF
PANAMA CANAL
The Vertical Scale is exaggerated about 100 fold
Juan Grande
GORGONA
MATACHIN
Obispo River
BAS OBISPO
Las Cascadas
EMPIRE
CULEBRA
PARAISO
Rio Grande
Pedro Miguel Locks
Miraflores Lock
Rio Grande
Corozal
Rio Grande
Balboa
PANAMA
High Water Level +10
Mean Ocean Level 0
Low Water Level −10
Bottom of Canal −41
Pacific Ocean Level
Length 8.63 Miles
49 Miles


CROSS SECTION—CULEBRA CUT
Rock Line
150′
45′
300′
San Juan
Chagres
Santa Barbara
Dos Bocas
El Vigia
Chagres R.
Chilibrillo R.
Gamboa
Las Delicias
Juan Mina
Pihiva
Palo Grande
Cruces
NORTH
Ruins of Old Panama
Petillo Pt.
PEDRO MIGUEL LOCKS
Pedro Miguel
PARAISO
Mt. Culebra
RAILROAD
Rio Grande
Miraflores
COROZAL
PANAMA
CASTRES HERMANAS
Mt. Ancon
Harbor of Panama
CABALLERO
FLAMENCO I.
CULEBRA
BAS OBISPO
Las Cascadas
EMPIRE
CULEBRA
MATACHIN
MIRAFLORES LOCK
BALBOA
Coroli
Pt. Farfan
Pt. Batele
Hacienda de Cabra
Pt. Bruja
Pt. Venado
PACIFIC OCEAN
GULF OF PANAMA

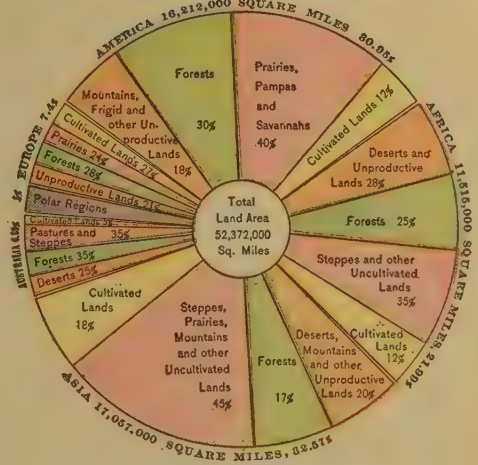
ANTARCTIC REGIONS
SHOWING THE ROUTES OF THE MOST IMPORTANT EXPLORATIONS
Scale of Miles
0 250 500 1000 1500
Amundsen's Route 1911-1912
Cook's Route 1772-1775
D'Urville's Route 1838-1840
Wilkes's Route 1838-1840
Ross' Route 1839-1843
Route of "Challenger" 1872-1876
Shackleton's Route 1909-
Route of "Belgica" 1898
Borchgrevink's Route 1898-1900
Drygalski's Route 1901-1903
Scott's Route 1901-1904
Brucc's Route 1903-1904
Limits of Pack Ice
TROPIC OF CAPRICORN
ANTARCTIC CIRCLE
SOUTH POLE
INDIAN OCEAN
PACIFIC OCEAN
ATLANTIC OCEAN
AFRICA
AUSTRALIA
NEW ZEALAND
SOUTH AMERICA
ANTARCTICA
From 150 Green. Long. 100 West
East from 100 from E 170 Green. F
150 Long. D East 100 from E
Long. 140 West

ARCTIC REGIONS
Scale of Miles
0 100 200 400 600
McClure, 1850-53
2 German Expeditions, 1869-70
Nordenskiold, 1878-79
De Long, 1881.
Nansen, 1892-96
Sverdrup, 1898-1902
Abruzzi, 1899-1900
Peary, 1906
Peary, 1909
EUROPE
ASIA
AMERICA
ARCTIC OCEAN
GREENLAND
ICELAND
NORTH POLE
ARCTIC CIRCLE
Meridian of Greenwich
BERING SEA
ALEUTIAN ISLANDS
PACIFIC OCEAN
ATLANTIC OCEAN
Brussels
London
Amsterdam
Hague
Hamburg
Hull
Lübeck
Edinburgh
Copenhagen
Königsberg
Libau
Riga
Stockholm
Christiansand
Christiania
Bergen
Trondhjem
Narva
Revel
St. Petersburg
Helsingfors
Abo
Archangel
Onega
Tornea
Hammerfest
Nordkyn
Vardo
Ostrov Kolguev
Vaigats Str.
Novaya Zemlya
Yugorski Shar Str.
Jan Mayen I.
Spitzbergen
Franz Josef Land
Nansen's Farthest North
Abruzzi 1900
Peary, April 6, 1909
Peary, 87° 06'
Peary, 1906
Nansen left Fram March 14, 1895
Jeannette sunk June 12, 1881
Wrangel I.
New Siberia I.
Lena R.
Yenisei R.
Ob R.
Kara Sea
Barents Sea
White Sea
Baffin Bay
Davis Str.
Hudson Str.
Hudson Bay
Greenland
Ellesmere Land
Grant Land
Parry Islands
Prince Patrick I.
Beaufort Sea
Mackenzie R.
Pt. Barrow
Pt. Bathurst
C. Parry
Melville I.
Banks Land
Victoria I.
Boothia Felix
Prince of Wales I.
Alaska
Yukon R.
Kotzebue Sd.
Norton Sd.
St. Michael
St. Lawrence I.
St. Matthew I.
Nunivak
Kuskokwim
Bristol Bay
Kodiak I.
Seward
Sitka
Chichagof
Baranof
Queen Charlotte Is.
Dixon Entrance
Aleutian Islands
Unalaska
Umnak I.
Kamchatka
Okhotsk
Sea of Okhotsk
Shantarski Is.
Gulf of Tartary
Amur R.
Saghalien
Hokkaido
Kuriles
Petropavlovsk
Kamandorski Is.
Bering I.
Copper I.
Wrangel I.
Herald I.
Banks I.
Prince Albert Land
Victoria Land
Parry Is.
Ellesmere I.
Axel Heiberg I.
Cornwallis I.
Devon I.
Somerset I.
Baffin I.
Southampton I.
Coats Land
Graham Land
Weddell Sea
Palmer Archipelago
Alexander I. Land
Ross Sea
Victoria Land
Ross I.
Mt. Erebus
Mt. Terror
Mt. Melbourne
Mt. Sidley
Mt. Markham
Mt. Kirkpatrick
Mt. Nansen
Mt. Lister
Mt. Hooker
Mt. Longstaff
Mt. Buckley
Mt. Wilson
Mt. Lyttelton
Mt. Murchison
Mt. Bowers
Mt. Hope
Mt. Dickason
Mt. Dickerson
Mt. Haggard
Mt. Rittmann
Mt. Nansen
Mt. Lister
Mt. Hooker
Mt. Longstaff
Mt. Buckley
Mt. Wilson
Mt. Lyttelton
Mt. Murchison
Mt. Bowers
Mt. Hope
Mt. Dickason
Mt. Dickerson
Mt. Haggard
Mt. Rittmann

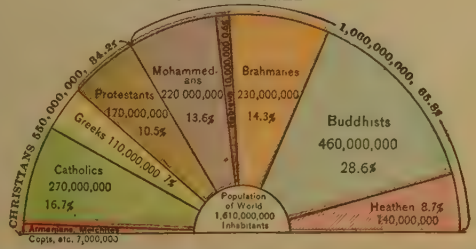
AREAS OF THE EARTH



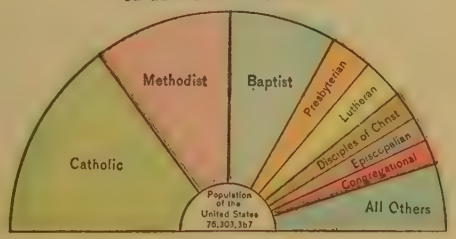
CHARACTER OF LAND OF THE EARTH



PRINCIPAL RELIGIONS OF THE WORLD



PRINCIPAL RELIGIOUS SECTS OF THE UNITED STATES



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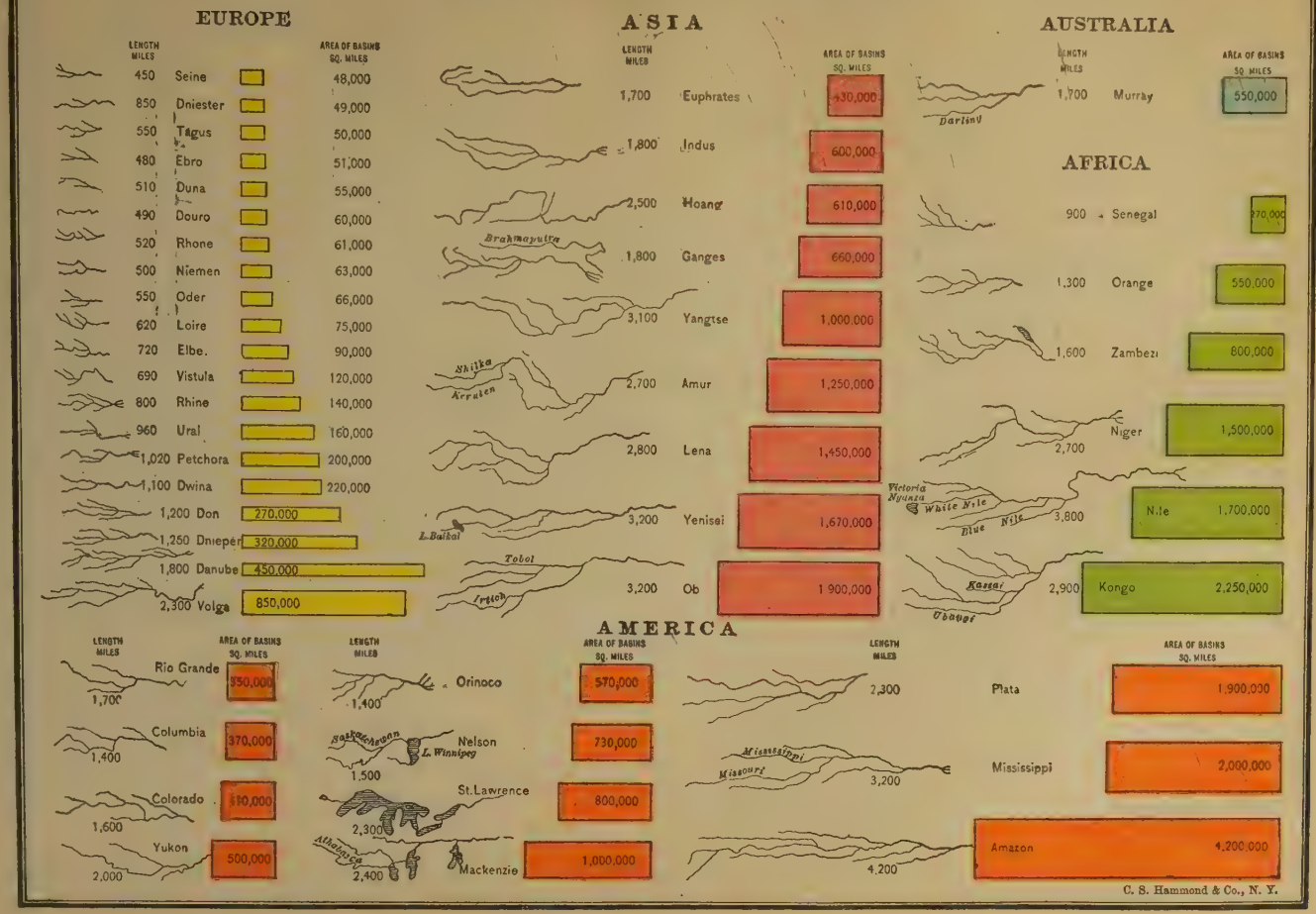
RIVER SYSTEMS OF THE WORLD



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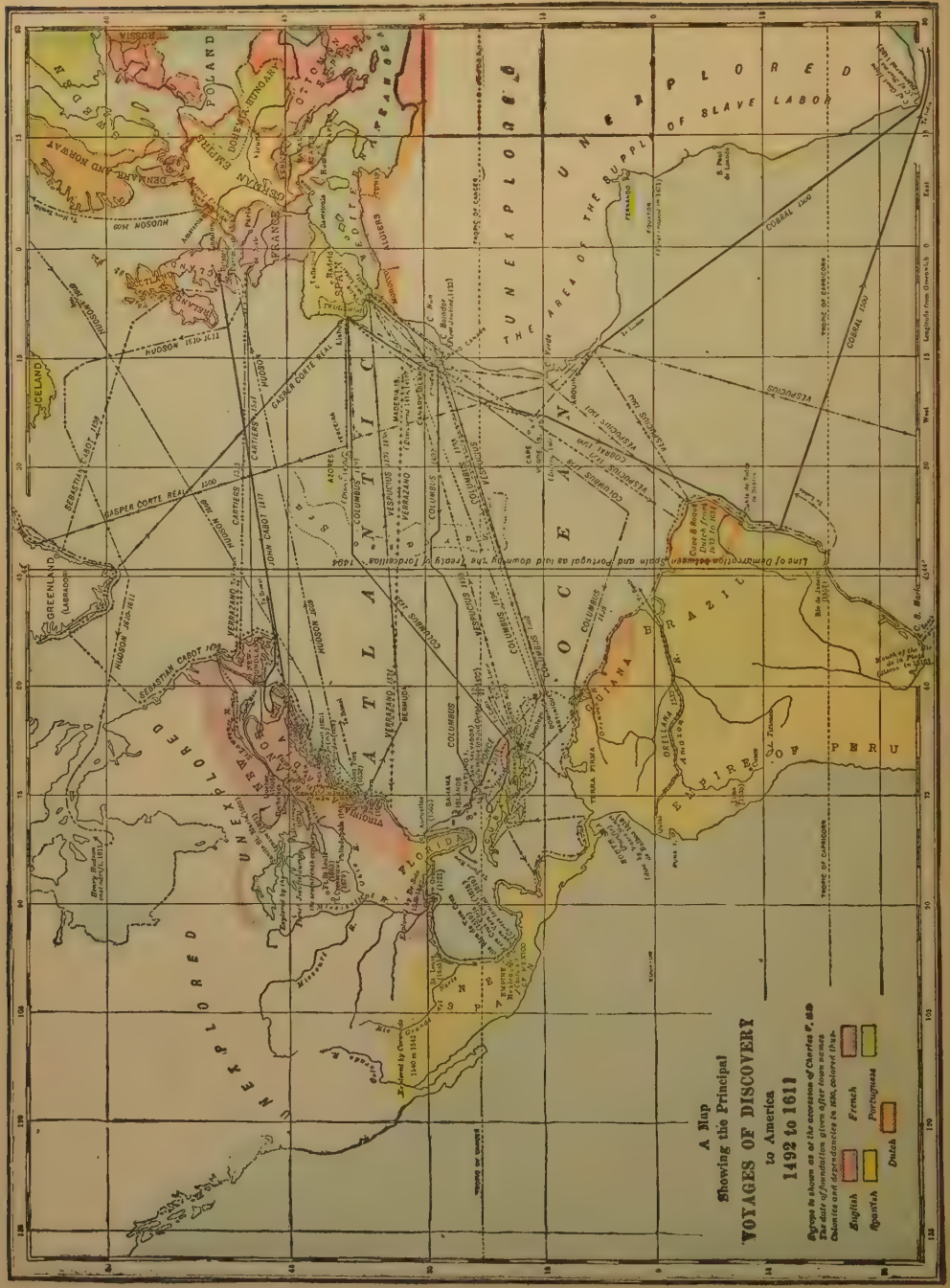
A Map
Showing the Principal
VOYAGES OF DISCOVERY
to America
1492 to 1611
English
French
Portuguese
Spanish
Dutch
UNEXPLORED
EXPLORED
ATLANTIC OCEAN
PACIFIC OCEAN
GREENLAND
ICELAND
NEW FRANCE
VIRGINIA
FLORIDA
MEXICO
PERU
BRAZIL
GUIANA
HUDSON BAY
NEW FOUNDLAND
POLAND
RUSSIA
SWEDEN
DENMARK AND NORWAY
GERMANY
FRANCE
SPAIN
PORTUGAL
ITALY
TURKEY
ENGLAND
HOLLAND
Line of Demarcation between Spain and Portugal as laid down by the Treaty of Tordesillas 1494
THE AREA OF THE SUPPLY OF SLAVE LABOR

MAP OF THE
UNITED STATES
SHOWING
ACQUISITION OF TERRITORY
Scale of Miles
0 50 100 200 300 400
ORIGINAL AREA OF THE UNITED STATES 1783
TERRITORY OF LOUISIANA
Purchased from France 1803
CEDED BY MEXICO 1848
TEXAN ANNEXATION 1845
GADSDEN PURCHASE 1853
ACQUIRED BY EXPLORATION
ACQUIRED BY TREATY
CEDED BY TREATY
ALASKA 1867
PHILIPPINE ISLANDS 1899
HAWAIIAN ISLANDS 1898
GUAM ISLAND 1898
WAKE ID. 1898
Part of SAMOA ISLANDS 1900
PORTO RICO 1899
GULF OF MEXICO
PACIFIC OCEAN
ATLANTIC OCEAN
BERING SEA
CARIBBEAN SEA
SULU SEA
CHINA SEA
DOMINION OF CANADA
MEXICO
CUBA
SPAIN
Key West 1822

PRINCIPAL COUNTRIES OF THE WORLD

COUNTRY	FORM OF GOVERNMENT	CAPITAL	PRESENT HEAD	ACCEDED	SQUARE MILES	POPULATION
Abyssinia	Absolute Monarchy	Addis Abeba	Lij Yasu	May 15, '11	432,432	8,000,000
Afghanistan	Absolute Monarchy	Kabul	Habibullah Khan	Oct. 3, '01	250,000	5,000,000
Albania	Limited Monarchy				5,000	2,000,000
Andorra	Republic				175	5,231
Argentina	Republic	Buenos Aires	Roque Saenz Pena	Oct. 12, '10	1,135,119	7,500,000
Australia	Commonwealth	Yass Canberra	Lord Denman	July, '11	3,063,041	4,805,005
Austria-Hungary	Limited Monarchy	Vienna, Budapest	Francis Joseph I	Dec. 2, '48	261,107	51,039,810
Belgium	Limited Monarchy	Brussels	Albert I	Dec. 23, '09	11,373	7,423,784
Belgian Kongo		Boma			909,654	15,500,000
Bhutan	Limited Monarchy	Punakha	Ugyen Wangchuk	Aug., '07	20,000	250,000
Bolivia	Republic	Sucre; La Paz	Eliodoro Villazon	Aug. 6, '09	515,156	2,019,083
Brazil	Republic	Rio de Janeiro	Hermes da Fonseca	Nov. 15, '10	3,270,000	21,500,000
British Empire	Limited Monarchy	London	George V	May 6, '10	13,123,712	434,686,000
Bulgaria	Limited Monarchy	Sofia	Ferdinand	Aug. 14, '87	38,080	5,000,000
Canada	Confederation	Ottawa	Duke of Connaught	Oct. 13, '11	3,729,665	7,206,643
Chile	Republic	Santiago	Ramon Barros Luco	Dec. 23, '10	292,580	3,248,224
China	Republic	Peking	Yuan Shi-Kai	Feb. 12, '12	4,277,170	439,214,000
Colombia	Republic	Bogota	Carlos E. Restrepo	July 15, '10	438,436	5,631,850
Costa Rica	Republic	San Jose	Ricardo Jimenez	May 8, '10	23,000	388,266
Cuba	Republic	Havana	Mario Gracia Menocal	May 20, '13	45,883	2,150,112
Denmark	Limited Monarchy	Copenhagen	Christian X	May 14, '12	15,592	2,901,219
Denmark, Colonies of					87,174	125,143
Dominican Republic	Republic	Santo Domingo	Adolfo Nouel	April 14, '13	19,325	708,000
Ecuador	Republic	Quito	Leonidas Plaza	Sept. 1, '12	116,000	1,500,000
Egypt *a*	Limited Monarchy	Cairo	Abbas Hilmi	Jan. 8, '92	400,000	11,287,350
France	Republic	Paris	Raymond Poincare	Feb. 17, '13	207,054	39,601,509
France, Colonies of					4,995,125	51,125,510
Germany	Limited Monarchy	Berlin	William II	June 15, '88	208,780	64,925,993
Germany, Colonies of					1,027,820	14,546,000
Great Britain and Ireland	Limited Monarchy	London	George V	May 6, '10	121,391	45,211,888
England		London			58,626	36,070,492
Ireland		Dublin			32,360	4,381,951
Scotland		Edinburgh			30,405	4,759,445
Greece	Limited Monarchy	Athens	Constantine XII	March 1, '13	25,064	4,000,000
Guatemala	Republic	New Guatemala	Manuel E. Cabrera	March 15, '11	48,290	1,992,000
Haiti	Republic	Port au Prince	Michel Oreste	May 4, '13	10,204	2,029,700
Honduras	Republic	Tegucigalpa	Manuel Bonilla	Nov. 3, '11	46,400	553,446
India	Limited Monarchy	Delhi	Charles Hardinge	Nov. 20, '10	1,773,688	315,132,537
Italy	Limited Monarchy	Rome	Victor Emanuele III	July 29, '00	110,660	34,686,683
Italy, Colonies of					601,020	1,767,000
Japan	Limited Monarchy	Tokyo	Yoshihito Harunomiya	July 30, '12	147,655	50,295,279
Japan, Dependencies of					95,695	17,090,000
Liberia	Republic	Monrovia	Daniel Howard	Jan. 1, '12	40,000	2,120,000
Liechtenstein	Monarchy	Vaduz	John II	Nov. 12, '58	65	9,854
Luxemburg	Limited Monarchy	Luxemburg	Marie Adelaide	Feb. 26, '12	998	259,899
Mexico	Republic	Mexico	Victoriano Huerta	Feb. 18, '13	767,274	15,063,207
Monaco	Limited Monarchy	Monaco	Albert Honore Charles	Sept. 10, '89	8	19,121
Montenegro	Limited Monarchy	Centinje	Nicholas I	Aug. 14, '60	3,630	500,000
Nepal	Absolute Monarchy	Khatmandu	Jang	Dec. 11, '11	54,000	5,000,000
Netherlands	Limited Monarchy	The Hague	Wilhelmina, Queen	Nov. 23, '90	12,648	5,980,000
Netherlands, Colonies of					783,000	38,000,000
New Zealand	Commonwealth	Wellington	Lord Liverpool	Aug. 6, '12	104,751	1,021,066
Nicaragua	Republic	Managua	Adolfo Diaz	Dec. 31, '12	49,200	600,000
Norway	Limited Monarchy	Christiania	Haakon VII	Nov. 18, '05	124,130	2,392,698
Oman	Absolute Monarchy	Maskat	Seyyid Feysil	June 4, '88	82,000	800,000
Panama	Republic	Panama	Belisario Porras	Oct. 1, '12	31,570	427,000
Paraguay	Republic	Asuncion	Eduardo Schaerar	Aug. 15, '12	171,204	752,000
Persia	Limited Monarchy	Teheran	Abu'l Kassim Khan	Mar. 4, '11	628,000	9,000,000
Peru	Republic	Lima	Guillermo Billinghurst	Sept. 24, '12	695,733	4,500,000
Portugal	Republic	Lisbon	Manuel de Arriaga	Aug. '11	35,490	5,975,000
Portugal, Colonies of					802,952	9,675,000
Roumania	Limited Monarchy	Bukharest	Carol I	March 26, '81	50,720	6,996,000
Russia	Absolute Monarchy	St. Petersburg	Nicholas II	Nov. 1, '94	8,647,657	168,000,000
Russia, Dependencies of					107,000	1,050,000
Salvador	Republic	San Salvador	Carlos Melendez	March '13	7,225	1,133,094
San Marino	Republic	San Marino			38	11,139
Servia	Limited Monarchy	Belgrade	Peter I	June 15, '03	18,650	4,000,000
Siam	Absolute Monarchy	Bangkok	Chowfa Mahn Vajiravudh	Oct. 23, '10	195,000	6,230,000
Spain	Limited Monarchy	Madrid	Alphonso XIII	May 17, '86	194,783	20,258,548
Spain, Colonies of					180,580	291,946
Sweden	Limited Monarchy	Stockholm	Gustaf V	Dec. 8, '07	172,876	5,521,943
Switzerland	Republic	Bern	Edouard Muller	Jan. 1, '13	15,976	3,765,123
Turkey & tributary states *b*	Limited Monarchy	Constantinople	Mohammed V	April 27, '09	682,960	17,425,000
United South Africa	Confederation	Pretoria, Cape T'n	Viscount Gladstone	May 30, '10	473,184	5,973,394
United States, Continental	Republic	Washington	Woodrow Wilson	March 4, '13	3,026,789	91,972,266
U. S., Dependencies of					716,517	9,143,223
Uruguay	Republic	Montevideo	Jose Battle y Ordonez	March 1, '11	72,210	1,140,799
Venezuela	Republic	Caracas	Juan Vicente Gomez	June, '10	393,976	2,713,703

a Under suzerainty of Turkey, but actual administration controlled by Great Britain. *b* Exclusive of Egypt and European Turkey.

THE WORLD

SHAPE AND SIZE OF THE EARTH: The earth is very nearly an oblate spheroid, whose shorter axis coincides with its axis of rotation passing through the two poles.

According to Colonel Clarke's calculations, its major axis measures 41,853,124 feet, or 7,926.5 statute miles; its minor axis 41,710,242 feet, or 7,899.5 statute miles; its circumference along the Equator measures 24,902 statute miles, or 21,600 geographical miles; its total area 196,940,400 statute square miles; and its volume 259,880 million cubic miles.

Of this total area, 8.4 p. c. (16,464,700 sq. m.) are within the Arctic and Antarctic regions; 51.6 p.c. (102,244,554 sq. m.) within the two temperate regions; 40 p. c. (78,231,046 sq. m.) within the Tropics.

THE LAND: The land covers 54,807,420 sq. m., on the assumption that 250,000 sq. m. of land remain to be discovered within the Arctic Regions, and that the supposed Antarctic continent, or "Antarctis," has an extent of 2,500,000 sq. m. within the Antarctic Circle.

THE OCEANS: The oceans, including the inland seas connected with them, cover 142,132,980 sq. m., or 72 p. c. of the total surface of the earth. There are 2.59 sq. m. of ocean to every sq. m. of land. This area is distributed over the different areas as follows: Arctic Ocean, including Hudson Bay, 5,785,000 sq. m.; Atlantic Ocean, 34,301,400 sq. m.; Indian Ocean, 28,615,600 sq. m.; Pacific Ocean, 67,699,630 sq. m.; Antarctic Ocean, 5,731,350 sq. m.

HEIGHTS AND DEPTHS: The mean height of the land has been estimated at 2,440 feet; the mean depth at the sea 11,470 feet (Karstans). The highest mountain (Mt. Everest) rises to a height of 29,000 feet; the greatest depth of the ocean as yet discovered (in the Pacific, between Guam and Midway) is 31,614 feet. If the whole of the solid crust of the earth were to be levelled, so as to form a spheroid, it would still be covered by an ocean of a uniform depth of 8,000 feet (Prof. Penck).

PRINCIPAL CITIES OF THE WORLD

The following list contains the principal cities of the world. In it will be found approximately all places of more than thirty thousand inhabitants and many of those of from twenty to thirty thousand. The population figures are from the latest census or are estimates from the most reliable sources. Capitals of countries are indicated by an asterisk (*).

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Aachen, Germany	156,143	Amsterdam, Neth	564,186	Bahia, Brazil	230,000	Benevento, Italy	24,447
Aalborg, Denmark	31,457	Amsterdam, N. Y.	31,267	Bahia Blanca, Arg.	25,000	Berbera, Br. Somaliland	30,000
Aarhuus, Denmark	55,193	Ancona, Italy	56,835	Bahour, India	56,595	Berchem, Belgium	31,382
Abbeokuta, Yoruba	200,000	Anderlecht, Belgium	64,974	Baireuth, Germany	31,903	Berdiansk, Russia	29,168
Aberdare, Wales	50,844	Andijan, Rus. in Asia	46,682	Baku, Russia in Asia	179,133	Berditchef, Russia	53,728
Aberdeen, Scotland	163,684	Andria, Italy	49,569	Ballarat, Australia	49,202	Bergamo, Italy	47,772
Abersychan, England	24,661	Angers, France	82,392	Baltimore, Md	558,485	Bergen, Norway	72,251
Abertillery, England	35,425	Angouleme, France	37,650	Bamberg, Germany	45,483	Berkeley, Cal	40,434
Abo, Russia	43,680	Antequera, Spain	31,609	Bangalore, India	189,393	Berlat, Roumania	24,000
Accrington, England	45,031	Antigua, Guatemala	12,000	Bangkok, Siam*	600,000	Berlin, Germany*	2,071,257
Acireale, Italy	35,418	Antofagasta, Chile	26,445	Banjermassin, Borneo	51,880	Bern, Switzerland*	70,339
Acton, England	57,523	Antwerp, Belgium	320,640	Barcelona, Spain	533,000	Bernburg, Germany	34,929
Adana, Turk. in Asia	45,000	Aomori, Japan	34,857	Bareilly, India	131,208	Besancon, France	55,404
Addis Abeba, Abys.*	35,000	Apeldoorn, Neth	32,548	Barfrush, Persia	50,000	Beuthen, Germany	67,718
Adelaide, Australia	179,793	Aquila, Italy	21,188	Bari delle Puglie, Italy	77,478	Beziers, France	52,510
Aden, Arabia	42,758	Arad, Hungary	56,220	Barili, Philippine Is.	31,617	Bhagalpur, India	75,560
Adrianople, Turkey in Europe	81,000	Arbroath, Scotland	20,648	Barking Town, Eng.	31,302	Bhaunagar, India	56,442
Agra, India	182,419	Arequipa, Peru	40,000	Barletta, Italy	42,022	Bhopal, India	77,023
Agram, Hungary	57,690	Arezzo, Italy	44,316	Barmen, Germany	169,214	Bialystok, Russia	91,695
Aguascalientes, Mex.	56,500	Argao, P. I.	35,448	Barnaul, Rus. in Asia	29,850	Biebrich, Germany	21,199
Ahmedabad, India	215,448	Arles, France	29,314	Barnes, England	30,379	Biel, Switzerland	29,394
Aidin, Turkey in Asia	38,000	Armentieres, France	29,418	Barnsley, England	50,623	Bielefeld, Germany	78,380
Airdrie, Scotland	24,388	Arnhem, Neth	62,279	Baroda, India	103,790	Bikaner, India	53,078
Aix, France	29,418	Aschersleben, Ger	28,964	Barquisimeto, Ven	31,476	Bilbao, Spain	83,306
Ajmere, India	73,839	Ascoli, Italy	28,882	Barranquilla, Col	55,000	Bilston, England	25,681
Akerman, Russia	32,470	Ashington, England	24,583	Barrow-in-Furness, England	63,775	Binghamton, N.Y.	48,443
Akita, Japan	34,350	Ashkabad, Russia	26,835	Barry, Wales	33,767	Birkenhead, England	130,832
Akron, Ohio	69,067	Ashton-in-Makerfield, England	21,540	Basel, Switzerland	124,392	Birmingham, Ala	132,685
Albany, N. Y.	100,253	Ashton-under-Lyne, England	45,179	Basra, Turkey in Asia	50,000	Birmingham, England	525,960
Alcamo, Italy	51,809	Asnieres, France	31,336	Batangas, P. I.	33,131	Bisceglie, Italy	30,885
Alcoy, Spain	32,053	Asti, Italy	38,045	Batavia, Java*	115,887	Bitlis, Turkey in Asia	38,800
Aldershot, England	35,175	Aston Manor, Eng.	75,042	Bath, England	50,729	Bitonto, Italy	30,617
Aleppo, Turk. in Asia	127,150	Astrakhan, Russia	121,580	Batley, England	36,395	Blackburn, England	133,064
Alessandria, Italy	71,298	Asuncion, Paraguay	60,000	Batum, Russia	28,512	Blackpool, England	58,376
Alexandria, Egypt	383,934	Athens, Greece*	167,479	Bauan, Philippine I.	39,049	Blagoveschensk, Russia in Asia	37,368
Alexandropol, Russia	30,616	Atlanta, Ga	154,839	Bautzen, Germany	29,419	Blaydon, England	31,148
Alexandrovsk, Russia in Asia	40,807	Atlantic City, N. J.	46,150	Bay City, Mich	45,166	Bloemfontein, Orange Free State	33,890
Algiers, Algeria*	138,708	Aubervilliers, France	31,215	Bayonne, France	27,601	Blois, France	20,434
Alicante, Spain	50,142	Auburn, N. Y.	34,668	Bayonne, N. J.	55,545	Blyth, England	28,490
Aligarh, India	70,434	Auckland, N. Zealand	93,544	Beckenham, England	31,693	Bobruisk, Russia	35,177
Allahabad, India	166,463	Augsburg, Germany	94,923	Beddwellty, England	22,551	Bocholt, Germany	26,404
Allenstein, Germany	33,077	Augusta, Ga	41,040	Bedford, England	39,185	Bochum, Germany	136,931
Allentown, Pa	51,913	Aussig, Austria	37,265	Bedlingtonshire, Eng.	25,253	Bogota, Colombia*	130,000
Almeria, Spain	47,326	Aux Cayes, Haiti	25,000	Beirut, Turk. in Asia	118,800	Bokhara, Rus. in Asia	75,000
Alost, Belgium	34,309	Avellino, Italy	23,760	Bekes, Hungary	37,547	Bologna, Italy	152,009
Altenburg, Germany	38,818	Avignon, France	46,896	Belfast, Ireland	385,492	Bolton, England	180,885
Altona, Germany	172,628	Ayr, Scotland	32,985	Belfort, France	32,567	Bombay, India	972,930
Altoona, Pa	52,127	Ayuthia, Siam	50,000	Belgrade, Servia*	77,816	Bona, Algeria	36,993
Alwar, India	56,771	Azof, Russia	25,124	Bellary, India	58,247	Bonn, Germany	87,978
Ambala, India	78,638			Bello Horizonte, Brazil	20,000	Bootle, England	69,881
Amiens, France	90,758	Bacup, England	22,324	Benares, India	204,222	Bordeaux, France	257,638
Amoy, China	114,000	Badajoz, Spain	30,899	Bendery, Russia	33,741	Borgerhout, Belgium	50,306
Amritsar, India	152,866	Bagdad, Turk. in Asia	145,000	Bendigo, Australia	42,660		

Boston, Mass.	670,585
Botuchany, Roum.	32,000
Boulogne-sur-Mer, France.	49,949
Boulogne-sur-Seine, France.	44,416
Bourges, France.	46,551
Bournemouth, Eng.	78,677
Bradford, England.	288,505
Braga, Portugal.	24,202
Bralia, Roumania.	58,392
Brandenburg, Ger.	53,595
Brantford, Canada.	23,095
Breda, Netherlands.	26,949
Bremen, Germany.	214,861
Brescia, Italy.	70,614
Breslau, Germany.	512,105
Brest, France.	84,284
Brest-Litovsk, Russia.	50,755
Bridgeport, Conn.	102,054
Bridgetown, Barbados	35,000
Brieg, Germany.	29,035
Brighouse, England.	20,845
Brighton, England.	131,250
Brisbane, Australia.	136,662
Bristol, England.	357,059
Broach, India.	42,000
Brockton, Mass.	56,878
Broken Hill, Austral.	32,070
Bromberg, Germany.	57,696
Bromley, England.	33,649
Bruges, Belgium.	54,015
Brunn, Austria.	109,346
Brunswick, Ger.	136,397
Brusa, Turk. in Asia.	76,303
Brussels, Belgium*.	195,630
Bucaramanga, Col.	20,000
Budapest, Hungary*.	812,728
Budweis, Austria.	39,328
Buenos Aires, Arg.*	333,532
Buer, Germany.	40,280
Buffalo, N. Y.	423,715
Bukharest, Roum.*.	294,572
Burg, Germany.	24,074
Burgos, Spain.	30,167
Burnley, England.	106,337
Burslem, England.	38,766
Burton-upon-Trent, England.	48,275
Bury, England.	58,649
Butte, Mont.	39,165
Cadiz, Spain.	69,382
Caen, France.	44,794
Caerphilly, Wales.	32,850
Cagliari, Italy.	53,747
Cairo, Egypt*.	692,657
Calais, France.	59,743
Calcutta, India.	890,493
Calgary, Canada.	43,665
Calicut, India.	76,981
Callao, Peru.	31,000
Caltagirome, Italy.	44,879
Caltanissetta, Italy.	43,303
Calumet, Mich.	30,000
Camaguey, Cuba.	29,616
Cambridge, England.	40,028
Cambridge, Mass.	104,839
Camden, N. J.	94,538
Campeche, Mexico.	17,000
Campinas, Brazil.	40,000
Candia, Crete.	22,230
Canea, Crete.	24,537
Cannes, France.	30,420
Cannock, England.	28,588
Cannstadt, Germany.	26,575
Canterbury, Eng.	24,628
Canton, China.	900,000
Canton, Ohio.	50,217
Cape Coast Castle, Gold Coast, Africa	28,948
Cape Haitien, Haiti.	29,000
Cape Town, Cape of Good Hope*.	135,000
Caracas, Venezuela*.	72,429
Carcar, P. I.	31,895
Carcassonne, France.	30,720
Cardenas, Cuba.	24,280
Cardiff, Wales.	182,280
Carlisle, England.	46,432
Carrara, Italy.	42,097
Cartagena, Colombia	27,000
Cartagena, Spain.	99,871
Casale, Italy.	31,793
Caserta, Italy.	32,709
Cassel, Germany.	153,196
Castellammare, Italy.	32,841
Castellon, Spain.	29,904
Castleford, England.	23,101
Castres, France.	27,308
Catania, Italy.	149,295
Catanzaro, Italy.	31,824
Cawnpur, India.	174,031
Cayenne, French Guiana*.	12,300
Ceara, Brazil.	50,000
Cebu, Philippine I.	31,079
Cedar Rapids, Iowa.	32,811
Celaya, Mexico.	25,565
Celle, Germany.	23,263
Cerignola, Italy.	34,195
Cesena, Italy.	42,240
Cette, France.	33,246
Chadderton, England	28,305
Chalon-sur-Saone, France.	29,058
Chandarnagar, India.	26,000
Changchau, China.	500,000
Changsha, China.	230,000
Chapra, India.	45,400
Charleroi, Belgium.	28,083
Charleston, S. C.	58,833
Charlotte, N. C.	34,014
Charlotte Amalie, St. Thomas.	12,000
Charlottenburg, Germany.	305,978
Charlottetown, Can.	11,198
Chatham, England.	42,250
Chattanooga, Tenn.	44,604
Chaux de Fonds, Switzerland.	38,784
Chefu, China.	75,000
Chelsea, Mass.	32,452
Cheltenham, Eng.	48,944
Chemnitz, Germany.	244,421
Chengte, China.	100,000
Chepping Wycombe, England.	20,390
Cherbourg, France.	42,938
Chernigof, Russia.	27,006
Cherson, Russia.	59,076
Chester, England.	39,038
Chester, Pa.	38,537
Chesterfield, England	37,429
Chicago, Ill.	2,185,283
Chiengmai, Siam.	60,000
Chieti, Italy.	26,368
Chihuahua, Mexico.	30,405
Chillan, Chile.	36,681
Chinandega, Nicr.	20,000
Chingtu, China.	1,000,000
Chinkiang, China.	167,000
Chioggia, Italy.	30,563
Chiswick, England.	38,705
Cholan, Cochin China	40,000
Cholon, China.	129,721
Chorley, England.	30,317
Christchurch, New Zealand.	76,709
Christiania, Norway*	229,101
Chungking, China.	600,000
Cienfuegos, Cuba.	30,100
Cincinnati, Ohio.	363,591
Ciudad Porfirio Diaz, Mexico.	16,000
Cleethorpe with Thrunscoe, England.	21,419
Clermont, France.	65,079
Cleveland, Ohio.	560,663
Clichy, France.	39,521
Clydebank, Scotland.	37,547
Coatbridge, Scotland.	43,287
Coban, Guatemala.	30,770
Coblenz, Germany.	56,487
Cocanada, India.	48,096
Cochabamba, Bolivia	25,000
Coimbatore, India.	53,080
Colchester, England.	43,463
Colima, Mexico.	21,000
Colmar, Germany.	41,791
Colne, England.	25,693
Cologne, Germany.	516,527
Colombo, Ceylon.	158,228
Colon, Panama.	15,000
Columbus, Ohio.	181,511
Combaconum, India.	59,673
Como, Italy.	38,895
Concepcion, Chile.	55,458
Concepcion, Paraguay	25,000
Conjevaram, India.	46,164
Constantine, Algeria.	48,243
Constantinople, Turkey*.	1,125,000
Copenhagen, Denmark*.	450,000
Copenick, Germany.	30,879
Copparo, Italy.	39,267
Corato, Italy.	41,573
Cordoba, Argentina.	60,000
Cordova, Spain.	58,275
Cork, Ireland.	76,632
Corrientes, Argentina	20,000
Coruna, Spain.	43,971
Coseley, England.	22,841
Courbevoie, France.	23,796
Courtrai, Belgium.	35,547
Coventry, England.	106,377
Covington, Ky.	53,270
Crajova, Roumania.	45,438
Crefeld, Germany.	129,406
Cremona, Italy.	37,693
Crewe, England.	44,970
Cristobal, Canal Zone, Panama.	6,000
Cronstadt, Russia.	59,539
Croydon, England.	169,559
Csaba, Hungary.	37,000
Cuddalore, India.	52,216
Cuenca, Ecuador.	40,000
Cuneo, Italy.	27,065
Curitiba, Brazil.	40,000
Cuttack, India.	51,364
Cuyaba, Brazil.	30,000
Cuzco, Peru.	30,000
Czegled, Hungary.	30,106
Czenstochowa, Rus.	53,650
Czernowitz, Austria.	67,622
Dacca, India.	90,542
Dallas, Texas.	92,104
Daman, India.	41,671
Damanhur, Egypt.	32,000
Damascus, Turkey in Asia.	225,000
Damietta, Egypt.	31,515
Danzig, Germany.	170,337
Darbhangah, India.	66,244
Darlington, England.	55,633
Darmstadt, Germany	83,123
Dartford, England.	23,609
Darwen, England.	40,344
Davenport Iowa.	43,028
Dayton, Ohio.	116,577
Debreezin, Hungary.	75,006
Decatur, Ill.	31,140
Delft, Netherlands.	33,916
Delhi, India*.	232,859
Denver, Colo.	213,381
Derby, England.	123,433
Des Moines, Iowa.	86,368
Dessau, Germany.	55,134
Desterro, Brazil.	27,000
Detroit, Mich.	465,766
Deventer, Neth.	27,411
Devonport, England.	81,694
Dewsbury, England.	53,358
Diamantina, Brazil.	15,000
Diarbekr, Turkey in Asia.	34,000
Dijon, France.	71,326
Doncaster, England.	30,520
Dordrecht, Neth.	44,449
Dorpat, Russia.	42,421
Dortmund, Germany	214,226
Douai, France.	33,649
Dover, England.	43,647
Drammen, Norway.	23,093
Dresden, Germany.	516,996
Dublin, Ireland.	309,272
Dubuque, Iowa.	38,494
Dudley, England.	51,092
Duisburg, Germany.	229,483
Duluth, Minn.	78,466
Dumbarton, Scotland	21,989
Dunaburg, Russia.	69,675
Dundee, Scotland.	165,006
Dunedin, N. Zealand.	61,279
Dunfermline, Scot.	28,103
Dunkirk, France.	38,925
Durango, Mexico.	31,092
Durban, Natal.	79,000
Duren, Germany.	32,511
Dusseldorf, Germany	358,728
Ealing, England.	61,235
Eastbourne, England.	52,544
East Ham, England.	133,504
East London, Cape of Good Hope.	25,220
East Orange, N. J.	34,371
East St. Louis, Ill.	58,547
Ebbw Vale, England.	30,559
Eberswalde, Germany	26,075
Eccles, England.	41,946
Ecija, Spain.	24,395
Edinburgh, Scotland*	320,315
Edmonton, Canada.	24,855
Edmonton, England.	64,820
Eger, Austria.	23,675
Eisenach, Germany.	35,153
Eisleben, Germany.	24,629
Ekaterinburg, Rus.	56,448
Ekaterinodar, Russia.	65,697
Ekaterinoslaf, Russia	135,552
Elberfeld, Germany.	170,195
Elbing, Germany.	58,636
Elche, Spain.	27,380
Elizabeth, N. J.	73,409
Elizavetgrad, Russia.	66,182
Elizavetpol, Russia.	33,000
Elmira, N. Y.	37,176
El Paso, Texas.	39,279
Emden, Germany.	24,038
Enfield, England.	56,344
Enschede, Neth.	31,838
Erdington, England.	32,337
Erfurt, Germany.	111,463
Erie, Pa.	66,525
Erith, England.	27,755
Erivan, Russia.	29,033
Erzerum, Turk. in Asia	38,900
Eschweiler, Germany	24,718
Essen, Germany.	294,653
Esslingen, Germany.	29,172
Etterbeek, Belgium.	32,515
Evansville, Ind.	69,647
Exeter, England.	48,660
Faenza, Italy.	40,370
Faizabad, India.	75,085
Falkirk, Scotland.	33,569
Fall River, Mass.	119,295
Farnworth, England.	28,142
Farukhabad, India.	67,338
Felegyhaza, Hungary	33,408

Felling, England	25,020	Granada, Nicaragua	17,000	Hiroshima, Japan	121,196	Kaiserslautern, Ger	52,306
Ferrara, Italy	87,648	Granada, Spain	75,900	Hirschberg, Germany	20,564	Kalamazoo, Mich	39,437
Ferrol, Spain	25,281	Grand Rapids, Mich.	112,571	Hobart, Australia	44,610	Kalgan, China	200,000
Fez, Morocco*	140,000	Grantham, England	20,074	Hoboken, N. J.	70,324	Kaluga, Russia	49,728
Finchley, England	39,425	Gratz, Austria	138,080	Hodmezo-Vasarhely, Hungary	60,883	Kamenetz-Podolsk, Russia	39,113
Firozpur, India	49,302	Graudenz, Germany	40,325	Hof, Germany	36,417	Kanagawa, Japan	99,657
Fitchburg, Mass.	37,826	Gravesend, England	28,117	Hohenfalza, Germany	25,604	Kandahar, Afg.	60,000
Fiume, Hungary	38,955	Greenock, Scotland	75,140	Holyoke, Mass.	75,730	Kano, No. Nigeria	100,000
Flensburg, Germany	60,922	Greifswald, Germany	24,679	Hongkong, China	421,499	Kansas City, Kan	85,331
Flint, Mich.	38,550	Grenoble, France	68,615	Honolulu, Hawaii*	39,306	Kansas City, Mo	248,381
Florence, Italy	205,589	Grimsby, England	74,663	Horde, Germany	32,791	Karachi, India	159,270
Foggia, Italy	53,151	Grodno, Russia	41,607	Hornsey, England	84,602	Karikal, India	30,000
Folkestone, England	33,495	Groningen, Neth	73,278	Houston, Tex.	78,800	Karliskrona, Sweden	26,074
Forest, Belgium	24,398	Grosswardein, Hun	50,177	Hove, England	42,173	Karlsruhe, Germany	111,249
Forli, Italy	43,708	Grunberg, Germany	23,168	Howrah, India	179,018	Kasan, Russia	143,707
Forst, Germany	33,875	Guadalajara, Mexico	125,000	Hubli, India	60,214	Kaschau, Hungary	40,102
Fort-de-France, Martinique	22,164	Guanajuato, Mexico	41,486	Huddersfield, Eng	107,825	Kashan, Persia	40,000
Fort Wayne, Ind	63,933	Guayaquil, Ecuador	75,000	Hue, Anam	50,000	Kashgar, Turkestan	75,000
Fort Worth, Tex.	73,312	Guben, Germany	38,593	Hull, Canada	18,217	Kaslof, Russia	40,347
Frankfort-on-Main, Germany	414,576	Guelph, Canada	15,153	Hull, England	278,024	Kasvin, Persia	40,000
Frankfort-on-Oder, Germany	68,277	Guildford, England	23,823	Huntington, W. Va	31,161	Kattowitz, Germany	43,173
Frederiksberg, Den	87,594	Guinobatan, P. I.	20,500	Hyde, England	33,444	Kecskemet, Hungary	57,812
Freetown, Sierra Leone*	34,463	Gwalior, India	119,433	Ibadan, Yoruba	200,000	Keighley, England	43,490
Freiberg, Germany	30,860	Haarlem, Neth	68,518	Ichang, China	45,000	Kerbela, Turk.in Asia	65,000
Freiburg, Germany	74,098	Hagen, Germany	88,605	Iglau, Austria	24,423	Kerman, Persia	60,000
Fremantle, Australia	23,008	Hague, Neth*	256,719	Ilford, England	78,205	Kermanshah, Persia	30,000
Fuchau, China	624,000	Haidarabad, India	499,840	Ilkeston, England	31,673	Kertch, Russia	33,347
Fukui, Japan	50,155	Hakodate, Japan	85,313	Imola, Italy	32,210	Kettering, England	29,976
Fukuoka, Japan	71,047	Halberstadt, Ger	46,481	Ince-in-Makerfield, England	22,038	Kharkof, Russia	197,405
Fulda, Germany	22,487	Halifax, England	101,556	Indianapolis, Ind	233,650	Khatmandu, Nepal*	50,000
Funchal, Madeira	20,844	Halifax, Nova Scotia	46,601	Indore, India	97,804	Khodjent, Russia in Asia	31,881
Funfkirchen, Hun	43,982	Halle, Germany	180,843	Innsbruck, Austria	27,056	Khotin, Russia	30,424
Furstenwalde, Ger	22,626	Hamadan, Persia	40,000	Inowraslow, Ger	24,471	Kidderminster, Eng	24,333
Furth, Germany	60,635	Hamah, Turkey in Asia	44,000	Insterburg, Germany	31,624	Kief, Russia	319,000
Gainsborough, Eng	20,589	Hamborn, Germany	101,703	Inverness, Scotland	22,216	Kiel, Germany	211,627
Galatz, Roumania	62,678	Hamburg, Germany	802,793	Ipswich, England	73,939	Kilmarnock, Scot	34,729
Galle, Ceylon	37,248	Hameln, Germany	22,061	Iquique, Chile	45,000	Kimberley, Cape of Good Hope	34,331
Gallipoli, Turkey	30,000	Hamilton, Canada	81,881	Iquitos, Peru	20,000	King's Lynn, Eng	20,205
Galveston, Tex.	36,981	Hamilton, Ohio	35,279	Irkutsk, Rus. in Asia	70,000	King's Norton, Eng	81,163
Gardaia, Algeria	39,000	Hamilton, Scotland	38,644	Iserlohn, Germany	31,274	Kingston, Canada	18,815
Gateshead, England	116,928	Hanau, Germany	43,663	Ismail, Russia	33,607	Kingston, Jamaica	46,542
Gaya, India	71,288	Handsworth, Eng	37,472	Ispahan, Persia	100,000	Kingston-upon-Thames, Eng	37,977
Geestemunde, Ger	25,102	Hangchau, China	68,618	Ivanovo-Voznesensk, Russia	64,628	Kirin, China	250,000
Gefle, Sweden	34,367	Hankau, China	600,000	Ivry-sur-Seine, France	28,585	Kirkcaldy, Scotland	39,600
Gelligaer, Wales	35,521	Hanley, England	870,000	Ixelles, Belgium	80,439	Kishenef, Russia	125,787
Gelsenkirchen, Ger	169,513	Hanoi, Anam*	67,998	Izhevsk, Russia	41,074	Kiukiang, China	36,000
Geneva, Switzerland	112,736	Hanover, Germany	103,238	Jabalpur, India	90,316	Kiungchau, China	30,000
Genoa, Italy	234,710	Harar, Abyssinia	302,375	Jackson, Mich.	31,433	Klausenburg, Hun	49,295
Georgetown, British Guiana*	53,176	Harbin, China	40,000	Jacksonville, Fla	57,699	Knoxville, Tenn	36,346
Gera, Germany	46,909	Harburg, Germany	60,000	Jaffna, Ceylon	33,879	Kobe, Japan	285,002
Ghazipur, India	39,429	Harrisburg, Pa.	67,025	Jaipur, India	160,167	Kochi, Japan	35,518
Ghent, Belgium	165,149	Harrogate, England	64,186	Jalandhar, India	67,735	Kofu, Japan	44,188
Gibraltar, Gibraltar	27,460	Hartford, Conn	33,706	Jalapa, Mexico	20,388	Kokand, Russia in Asia	86,704
Giessen, Germany	28,769	Hartlepool, England	98,915	Jamestown, N. Y.	31,297	Kokura, Japan	36,825
Gifu, Japan	40,168	Hathras, India	20,618	Janina, Turkey	30,000	Kolberg, Germany	24,786
Gijon, Spain	47,544	Havana, Cuba*	42,578	Jaroslaw, Austria	22,641	Kolhapur, India	51,373
Gillingham, England	52,252	Haverhill, Mass.	297,159	Jarrow, England	33,732	Kolomea, Austria	34,188
Gilly, Belgium	24,306	Havre, France	44,115	Jassy, Roumania	78,069	Kom, Persia	40,000
Girgenti, Italy	25,024	Hebburn, England	130,196	Jaunpur, India	42,000	Koniah, Turk. in Asia	44,000
Gladbach, Germany	66,414	Heidelberg, Germany	21,766	Jeleto, Russia	38,239	Konigsberg, Germany	245,994
Glasgow, Scotland	784,455	Heilbronn, Germany	49,527	Jeremie, Haiti	35,000	Konigshutte, Ger	72,641
Glauchau, Germany	24,596	Helder, Netherlands	40,000	Jerez, Spain	63,473	Koslin, Germany	23,236
Gleiwitz, Germany	66,981	Helsingborg, Sweden	26,681	Jersey City, N. J.	267,779	Kostroma, Russia	41,268
Glogan, Ger.	24,524	Helsingfors, Finland	32,238	Jerusalem, Turkey in Asia	48,000	Kottbus, Germany	48,643
Glossop, England	21,688	Hendon, England	117,317	Jhansi, India	55,724	Kovno, Russia	73,743
Gloucester, England	50,029	Herat, Afghanistan	38,806	Jodhpur, India	60,437	Krakow, Austria	91,323
Gnesen, Germany	25,339	Hereford, England	45,000	Johannesburg, Trans	158,580	Krasnoyarsk, Russia in Asia	33,337
Gomel, Russia	36,755	Herford, Germany	22,568	Johnstown, Pa.	55,482	Kremenchug, Russia	63,007
Gonaives, Haiti	18,000	Herne, Germany	32,527	Joliet, Ill	34,670	Kreuznach, Germany	23,167
Goole, England	20,334	Herstal, Belgium	57,147	Jokjokarta, Java	58,229	Kronstadt, Hungary	36,946
Gorakhpur, India	64,148	Hertogenbosch('s), Netherlands	22,829	Jonkoping, Sweden	23,240	Kuching, Borneo	25,000
Gorlitz, Germany	85,806	Heston and Isleworth, England	34,383	Joplin, Mo.	32,073	Kuka, No. Nigeria	60,000
Gosport and Alverstoke, England	33,301	Heywood, England	43,316	Jumet, Belgium	26,924	Kumamoto, Japan	59,717
Gotha, Germany	36,947	Hildesheim, Germany	26,698	Kabul, Afghanistan*	70,000	Kumassi, Gold Coast	70,000
Gottenborg, Sweden	160,523	Himeji, Japan	50,239	Kagoshima, Japan	59,001	Kure, Japan	66,000
Gottingen, Germany	37,594	Hindley, England	36,443	Kaisarieh, Turkey in Asia	72,000	Kursk, Russia	75,721
Govan, Scotland	89,725	Hirosaki, Japan	24,106			Kurume, Japan	33,273
			36,509			Kutais, Russia	32,492

Kwala Kangsa, Straits Settlements	77,234
Kyoto, Japan	380,568
La Crosse, Wis	30,417
Laeken, Belgium	34,726
Lagos, Nigeria	42,000
La Guaira, Ven	14,000
Lahore, India	228,318
Laibach, Austria	36,547
La Linea, Spain	31,861
La Louviere, Bel	22,037
Lancaster, England	41,414
Lancaster, Pa	47,227
Lanchau, China	500,000
Landsberg, Germany	39,339
Lansing, Mich	31,229
Laoag, P. I	34,454
La Paz, Bolivia*	68,000
La Plata, Argentina	75,023
La Rochelle, France	36,124
Lassa, Tibet	45,000
La Union, Spain	30,275
Lausanne, Switz	51,936
Laval, France	30,356
Lawrence, Mass	85,892
Lecce, Italy	32,687
Le Creuzot, France	30,584
Leeds, England	445,568
Leeuwarden, Neth	34,098
Leghorn, Italy	98,321
Lehe, Germany	37,457
Leicester, England	227,242
Leiden, Netherlands	57,095
Leigh, England	44,109
Leipzig, Germany	503,672
Leith, Scotland	80,489
Le Mans, France	63,272
Lemberg, Austria	159,877
Lens, France	24,353
Leon, Mexico	63,263
Leon, Nicaragua	62,569
Lexington, Ky	35,099
Leyton, England	124.736
Libau, Russia	64,505
Lichtenberg, Germany	81,199
Lieben, Austria	21,375
Liege, Belgium	174,768
Liegnitz, Germany	66,620
Lierre, Belgium	25,933
Lima, Ohio	30,508
Lima, Peru*	140,000
Limerick, Ireland	38,403
Limoges, France	84,121
Linares, Spain	38,245
Lincoln, England	57,294
Lincoln, Neb	43,973
Linden, Germany	73,379
Linz, Austria	58,778
Lipa, Philippine I	37,924
Lisbon, Portugal*	356,009
Lisle, France	210,696
Little Rock, Ark	45,941
Liverpool, England	746,566
Llandovery, Wales	32,077
Lodz, Russia	351,570
Lokeren, Belgium	22,838
London, Canada	46,177
London, England (Greater)*	7,252,963
Londonderry, Ireland	40,799
Longton, England	35,825
Lorca, Spain	69,836
Lorient, France	44,640
Los Angeles, Cal	319,198
Loughborough, Eng	22,992
Louisville, Ky	223,928
Louvain, Belgium	41,923
Lowell, Mass	106,294
Lowestoft, England	33,780
Luang-Prabang, Fr. Indo China	40,000
Lubeck, Germany	91,541
Lublin, Russia	50,152
Lucca, Italy	74,971
Lucerne, Switzerland	32,801
Luckenwalde, Ger	23,476
Lucknow, India	260,621
Ludenscheid, Ger	32,301
Ludwigshafen, Ger	72,286
Luneburg, Germany	27,790
Luton, England	50,000
Luxemburg, Luxemburg*	20,928
Lynn, Mass	89,336
Lyon, France	459,099
McKeesport, Pa	42,694
Maastricht, Neth	36,146
Macao, China	63,991
Macclesfield, Eng	34,804
Maceio, Brazil	37,000
Macon, Ga	40,665
Madras, India	517,335
Madrid, Spain*	539,835
Madura, India	105,984
Maebashi, Japan	41,714
Maesteg, Wales	24,977
Magdeburg, Ger	279,629
Mahrisch, Austria	30,100
Maidstone, England	35,477
Maikop, Rus. in Asia	34,191
Mainz, Germany	91,179
Mako, Hungary	33,722
Malaga, Spain	130,109
Malden, Mass	44,404
Malmo, Sweden	79,817
Malstatt-Burbach, Germany	38,554
Managua, Nicaragua*	30,000
Manaos, Brazil	50,000
Manchester, England	714,427
Manchester, N. H	70.063
Mandalay, India	183,816
Mangalore, India	44,108
Manila, P. I. *	219,928
Manipur, India	67,093
Manissa, Turkey in Asia	50,000
Mannheim, Germany	163,693
Manresa, Spain	23,416
Mansfield, England	36,897
Mantua, Italy	29,142
Maracaibo, Ven	50,000
Maranhao, Brazil	40,000
Marburg, Germany	21,860
Marchienne-au-Pont, Belgium	21,594
Margate, England	27,086
Maria Theresiopel, Hungary	82,122
Mariupol, Russia	31,116
Marsala, Italy	57,567
Marseille, France	491,161
Masaya, Nicaragua	20,000
Maskat, Arabia	60,000
Massa, Italy	26,413
Matanzas, Cuba	36,009
Matsumoto, Japan	33,493
Matsuyama, Japan	37,842
Matsuye, Japan	35,081
Maulman, India	58,446
Mayaguez, PortoRico	15,187
Mazatlan, Mexico	18,000
Mecca, Turk. in Asia	60,000
Mechlin, Belgium	59,372
Medellin, Colombia	60,000
Medina, Turkey in Asia	48,000
Medinet-el-Fayoum, Egypt	40,350
Meerut, India	118,129
Mehallet-el-Kebir, Egypt	31,535
Meiderich, Germany	33,690
Meissen, Germany	32,336
Mekinez, Morocco	56,000
Melbourne, Australia	549,200
Memel, Germany	21,470
Memphis, Tenn	131,105
Mendoza, Argentina	32,000
Merida, Mexico	43,630
Merseburg, Germany	21,226
Merthyr Tydfil, Wales	80.999
Meshed, Persia	60,000
Messina, Italy	149,778
Metz, Germany	60,419
Mexico, Mexico*	450,000
Miagao, P. I	22,100
Middlesbrough, Eng	104,787
Middleton, England	27,983
Milan, Italy	593,938
Milwaukee, Wis	373,857
Minden, Germany	26,454
Minneapolis, Minn	301,408
Minsk, Russia	90,912
Mirzapur, India	79,862
Miskolcz, Hungary	43,096
Mitau, Russia	35,011
Mito, Japan	36,928
Mobile, Ala	51,521
Modena, Italy	64,843
Modica, Italy	48,962
Mohilef, Russia	47,591
Molenbeek, Belgium	73,247
Molfetta, Italy	40,135
Mombasa, Br.E.Africa	27,000
Monastir, Turkey	50,000
Monclova, Mexico	15,000
Mongyr, India	35,880
Mons, Belgium	27,252
Montauban, France	30,506
Monterey, Mexico	85,000
Montevideo, Uru.*	389,837
Montgomery, Ala	38,136
Montignies-sur-Sambre, Belgium	22,275
Montlucon, France	35,062
Montpellier, France	75,950
Montreal, Canada	466,197
Montreuil, France	31,773
Monza, Italy	42,559
Moosejaw, Canada	13,823
Moradabad, India	75,128
More, Germany	23,251
Morelia, Mexico	37,278
Morioka, Japan	32,989
Morley, England	24,285
Morocco, Morocco*	60,000
Morshansk, Russia	25,913
Moscow, Russia	1,359,254
Mosul, Turk. in Asia	61,000
Motherwell, Scotland	40,378
Mountain Ash, Wales	42,256
Mt. Vernon, N. Y	30,919
Mouscron, Belgium	22,548
Muhlhausen, Ger	35,091
Mukden, China	160,000
Mulheim-on-Rhine, Germany	53,425
Mulheim-on-Ruhr, Germany	112,580
Multan, India	87,394
Munich, Germany	538,983
Munster, Germany	90,254
Murcia, Spain	111,539
Mustapha, Algeria	38,327
Muttra, India	60,042
Mysore, India	68,111
Nafa, Japan	43,132
Nagano, Japan	37,202
Nagasaki, Japan	153,293
Nagoya, Japan	288,639
Nagpur, India	127,734
Nagy-Koros, Hun	26,535
Nakhichivan, Russia	40 384
Namangan, Rus. in Asia	61,906
Namdinh, Tonkin	30,000
Namur, Belgium	31,939
Nanchang, China	300,000
Nancy, France	102,539
Nankin, China	270,000
Nantes, France	132,990
Naples, Italy	563,540
Nara, Japan	33,735
Narbonne, France	24,670
Nashville, Tenn	110,364
Nassau, Bahama I	12,000
Natal, Brazil	40,000
Naumburg, Germany	26,962
Nawangar, India	53,844
Negapatam, India	57,190
Neisse, Germany	25,938
Nelson, England	39,485
Neuchatel, Switz	20,843
Neuilly, France	37,493
Neumunster, Ger	34,555
Neunkirchen, Ger	32,357
Neuss, Germany	37,224
Nevers, France	27,673
Newark, N. J	347,469
New Bedford, Mass	96,652
New Britain, Conn	43,916
Newcastle, Australia	64,270
Newcastle, England	266,671
New Castle Pa	36,280
Newcastle under Lyme, England	20,204
New Guatemala, Guatemala*	125,000
New Haven, Conn	133,605
New Orleans, La	339,075
Newport, England	83,700
Newport, Ky	30,309
Newton, Mass	39,806
New Westminster, Canada	13,394
New York, N. Y	4,776,883
Nezhin, Russia	32,113
Niagara Falls, N, Y.	30,445
Nice, France	105,109
Niigata, Japan	59,576
Nijmegen, Neth	52,147
Nikolaief, Russia	92,060
Nimes, France	80,605
Ningpo, China	260,000
Nissa, Servia	24,000
Niuchwang, China	74,000
Nizhni Novgorod, Russia	95,124
Nizhni Tagilsk, Rus	31,449
Nordhausen, Ger	32,564
Norfolk, Va	67,452
Norkoping, Sweden	45,203
Northampton, Eng	90,076
Norwich, England	121,493
Nottingham, Eng	259,942
Novara, Italy	45,248
Novgorod, Russia	26,972
Novocherkask, Rus	51,963
Nuka, Russia	24,811
Nuneaton, England	37,083
Nuremberg, Ger	294,426
Nyireghyhaza, Hun	33,088
Oakland, Cal	150,174
Oaxaca, Mexico	35,049
Oberhausen, Ger	89,900
Odenburg, Hungary	33,478
Odenkirchen, Ger	20,060
Odense, Denmark	40,138
Odessa, Russia	449,673
Offenbach, Germany	65,372
Ogmore and Garw, Wales	26,747
Ohligs, Germany	27,839
Okayama, Japan	81,025
Oklahoma, Okla	64,205
Oldbury, England	32,240
Oldenburg, Germany	28,565
Oldham, England	147,495
Olmutz, Austria	22,106
Omaha, Neb	124,096
Omdurman, Egypt	69,000

Omsk, Russia in Asia.	53,050
Onamichi, Japan	30,529
Oporto, Portugal	167,955
Oppeln, Germany	33,907
Oran, Algeria	88,235
Orebro, Sweden	25,288
Orel, Russia	70,075
Orenburg, Russia	72,740
Orihuela, Spain	28,530
Orizaba, Mexico	32,894
Orleans, France	67,311
Oruro, Bolivia	20,000
Osaka, Japan	995,945
Osh, Russia in Asia	37,397
Oshkosh, Wis.	33,062
Osnabruck, Germany	65,957
Ostend, Belgium	43,190
Otaru, Japan	79,361
Otsu, Japan	39,595
Ottawa, Canada*	86,340
Ouro Preto, Brazil	59,249
Oviedo, Spain	48,103
Oxford, England	53,049
Pachuca, Mexico	37,487
Padang, Sumatra	35,158
Paderborn, Germany	29,441
Padua, Italy	82,281
Paisley, Scotland	84,477
Pakhoi, China	30,000
Palembang, Sumatra	53,788
Palermo, Italy	309,694
Palma, Spain	63,937
Palmas, Canary I.	44,517
Pamplona, Spain	28,886
Panama, Panama*	40,000
Pantin, France	32,604
Paoting, China	150,000
Para, Brazil	200,000
Paramaribo, Dutch Guiana*	32,585
Parana, Argentina	30,000
Paris, France*	2,714,068
Parma, Italy	49,340
Partick, Scotland	66,848
Pasadena, Cal.	30,291
Passaic, N. J.	54,773
Paterson, N. J.	125,600
Patiala, India	53,545
Patna, India	134,785
Patras, Greece	37,401
Pau, France	34,268
Pavia, Italy	35,447
Pawtucket, R. I.	51,622
Paysandu, Uruguay	28,000
Peking, China*	1,600,000
Pelotas, Brazil	41,591
Pembroke, Ireland	29,260
Penang, Straits Settlements	94,086
Penge, England	22,331
Pensa, Russia	61,851
Peoria, Ill.	66,950
Perigueux, France	31,976
Perm, Russia	45,403
Pernambuco, Brazil	120,000
Perpignan, France	36,157
Perth, Australia	54,000
Perth, Scotland	35,851
Perth Amboy, N. J.	32,121
Perugia, Italy	61,385
Pesaro, Italy	25,103
Peshawar, India	95,147
Peterborough, Can.	18,312
Peterborough, Eng.	33,578
Petropolis, Brazil	20,000
Pforzheim, Germany	59,389
Philadelphia, Pa.	1,549,008
Philippopolis, East Roumelia	42,849
Piacenza, Italy	36,064
Piatra, Roumania	25,000
Pietermaritzburg, Natal	34,676
Pilsen, Austria	68,079
Pingyang, Korea	74,213
Pinsk, Russia	27,938
Piotrkof, Russia	32,173
Piraeus, Greece	67,982
Pirmasens, Germany	33,998
Pisa, Italy	61,321
Pistoja, Italy	62,606
Pittsburgh, Pa.	533,905
Pittsfield, Mass.	32,121
Plauen, Germany	105,381
Ployesti, Roumania	42,687
Plymouth, England	112,042
Pnum Penh, Cambodia	50,000
Point de Galle, Ceylon	48,500
Poitiers, France	39,886
Pola, Austria	45,205
Poltava, Russia	53,060
Ponce, Porto Rico	35,005
Pondichery, India	47,843
Pont-y-Pridd, Wales	43,215
Poole, England	38,886
Poona, India	157,666
Port Arthur, China	50,000
Port au Prince, Haiti*	70,000
Port Elizabeth, Cape of Good Hope	32,959
Portland, Me.	58,571
Portland, Ore.	207,214
Port Louis, Mauritius	52,740
Porto Alegre, Brazil	100,000
Port of Spain, Trin.	54,100
Porto Novo, Dahomey	50,000
Porto Praya, Cape Verde Islands	20,000
Port Said, Egypt	50,179
Portsmouth, Eng.	231,165
Portsmouth, Va.	33,190
Posen, Germany	156,691
Potosi, Bolivia	27,000
Potsdam, Germany	62,243
Prague, Austria	476,964
Prato, Italy	51,453
Prenzlau, Germany	21,386
Pressburg, Hungary	65,867
Preston, England	117,113
Pretoria, Transvaal*	36,700
Prisrend, Turkey	40,000
Prossnitz, Austria	24,343
Providence, R. I.	224,326
Przemysl, Austria	46,295
Pskof, Russia	30,683
Puebla, Mexico	93,521
Pueblo, Colo.	44,395
Puerto Cabello, Ven	14,000
Puerto Plata, Santo Domingo	17,500
Punta Arenas, Chile	20,000
Quebec, Canada	78,067
Quedlinburg, Ger.	27,233
Queretaro, Mexico	33,152
Quezaltenango, Guate.	28,940
Quincy, Ill.	36,587
Quincy, Mass.	32,642
Quito, Ecuador*	80,000
Racine, Wis.	38,002
Radcliffe, England	26,085
Radom, Russia	30,126
Ragusa, Italy	31,922
Rampur, India	78,758
Ramsgate, England	29,605
Rangoon, India	289,432
Rathenow, Germany	24,891
Rathmines, Ireland	38,190
Ratibor, Germany	38,424
Ratisbon, Germany	48,801
Ravenna, Italy	64,031
Rawalpindi, India	87,688
Rawtenstall, Eng.	30,516
Reading, England	75,214
Reading, Pa.	96,071
Recklinghausen, Ger	53,701
Reggio di Calabria, Italy	44,415
Reggio nell' Emilia, Italy	58,490
Regina, Canada	30,210
Reichenberg, Austria	34,099
Reigate, England	28,505
Remscheid, Germany	72,159
Renaix, Belgium	21,686
Rennes, France	74,676
Resht, Persia	40,000
Reus, Spain	26,235
Reval, Russia	64,572
Rheims, France	108,385
Rheydt, Germany	43,999
Rhondda, Wales	152,798
Richmond, England	33,223
Richmond, Va.	127,628
Riga, Russia	282,943
Rimini, Italy	43,203
Rio de Janeiro, Brazil*	900,000
Rio Grande do Sul, Brazil	25,000
Rixdorf, Germany	237,289
Roanne, France	34,901
Roanoke, Va.	34,874
Rochdale, England	91,437
Rochefort, France	36,458
Rochester, England	31,388
Rochester, N. Y.	218,149
Rockford, Ill.	45,401
Rome, Italy*	560,726
Rosario, Argentina	150,000
Rostock, Germany	60,793
Rostof, Russia	119,889
Rotherham, England	62,507
Rotterdam, Neth.	407,493
Roubaix, France	124,365
Rouen, France	116,316
Roulers, Belgium	25,870
Rowley Regis, Eng.	37,000
Royal Leamington Spa, England	26,717
Rugby, England	21,762
Rustchuk, Bulgaria	32,661
Rutherglen, Scotland	24,411
Ryazan, Russia	46,122
Saarbrucken, Ger.	105,089
Sacremento, Cal.	44,696
Saga, Japan	35,083
Sagar, India	42,330
Saginaw, Mich	50,510
Saharanpur, India	66,254
Saigon, Fr. Cochin China	50,870
St. Denis, France	60,808
St. Denis, Reunion I.	27,392
St. Etienne, France	146,559
St. Gallen, Switz.	50,625
St. Gilles, Belgium	65,637
St. Helens, England	96,566
St. Henri, Canada	30,337
St. John, N. B.	42,499
St. Johns, Newfoundland	29,594
St. Joseph, Mo.	77,403
St. Josse-ten-Noode, Belgium	33,420
St. Louis, Mo.	687,029
St. Louis, Senegal*	24,070
St. Nazaire, France	35,813
St. Nicolas, Belgium	34,206
St. Ouen, France	35,436
St. Paul, Minn.	214,744
St. Petersburg, Rus.*	1,678,000
St. Quentin, France	50,278
St. Thomas, Canada	14,050
Sakai, Japan	54,040
Salem, India	70,621
Salem, Mass.	43,697
Salerno, Italy	42,727
Salford, England	231,380
Salisbury, England	21,217
Saloniki, Turkey	105,000
Saltillo, Mexico	23,996
Salt Lake City, Utah	92,777
Salzburg, Austria	33,067
Samara, Russia	89,999
Samarang, Java	89,286
Samarkand, Russia in Asia	58,194
San Antonio, Tex.	96,614
San Diego, Cal.	39,578
San Francisco, Cal.	416,912
San Jose, Costa Rica*	40,000
San Juan, Porto Rico*	48,716
San Luis Potosi, Mex.	61,019
San Miguel, Salvador	24,768
San Pier d'Arena, Italy	34,885
San Salvador, Sal.*	59,540
San Sebastian, Spain	37,812
San Severo, Italy	30,040
Santa Ana, Salvador	48,120
Santa Cruz, Canary Islands	38,419
Santa Fe, Argentina	33,000
Santander, Spain	54,694
Santiago, Chile*	400,000
Santiago, Spain	24,927
Santiago de Cuba, Cuba	45,470
Santo Domingo, Santo Domingo*	20,000
Santos, Brazil	40,000
Sao Paulo Brazil	340,000
Sapporo, Japan	55,304
Saragossa, Spain	99,118
Sarajevo, Austria	41,500
Saratof, Russia	143,431
Sasebo, Japan	68,344
Sassari, Italy	38,268
Savannah, Ga	65,064
Savona, Italy	38,355
Scarborough, Eng.	37,204
Schaerbeek, Belgium	85,218
Schenectady, N. Y.	72,826
Schiedam, Neth.	30,038
Schneidemuhl, Ger.	26,126
Schoneberg, Ger.	172,823
Schweidnitz, Ger.	31,329
Schwelm, Germany	20,438
Schwerin, Germany	41,628
Scranton, Pa.	129,867
Semipalatinsk, Russia in Asia	36,040
Seattle, Wash.	237,194
Sendai, Japan	100,231
Seoul, Korea*	196,646
Seraing, Belgium	43,208
Seres, Turkey	31,000
Sergievsk, Russia	31,413
Serpukhof, Russia	30,571
Sevastopol, Russia	53,595
Seville, Spain	148,315
Shahjahanpur, India	76,458
Shanghai, China	651,000
Shasih, China	80,000
Sheffield, England	454,653
Sherbrooke, Canada	16,405
Shidzuoka, Japan	48,744
Shimonoseki, Japan	46,280
Shipley, England	27,710
Shiraz, Persia	50,004
Sholapur, India	75,288
Shrewsbury, Eng.	29,389
Shusha, Russia	25,656
Sialkot, India	57,956
Siangtan, China	850,000
Sibonga, P. I.	23,865
Siegen, Germany	27,416
Siena, Italy	28,355
Simbirsk, Russia	44,111
Simferopol, Russia	60,876
Singan, China	875,000
Singapore, Straits Settlements	193,089

Sioux City, Iowa	47,828
Siut, Egypt	42,079
Sivas, Turk. in Asia	43,100
Skutari, Turk. in Asia	80,000
Slivno, En. Roumelia	24,542
Smethwick, England	70,681
Smichow, Austria	47,135
Smolensk, Russia	57,405
Smyrna, Turk. in Asia	201,000
Sofia, Bulgaria*	67,920
Solingen, Germany	50,536
Somerville, Mass	77,236
Southall Norwood, England	26,327
Southampton, Eng	119,039
South Bend, Ind	53,684
Southend on Sea, England	62,723
Southgate, England	33,613
Southport, England	51,650
South Shields, Eng	108,649
Spandau, Germany	84,855
Spezia, Italy	65,612
Spokane, Wash	104,402
Springfield, Ill	51,678
Springfield, Mass	88,926
Springfield, Mo	35,201
Springfield, Ohio	46,921
Srinagar, India	122,608
Stafford, England	23,385
Stalybridge, England	26,514
Stanislau, Austria	29,956
Stanley, England	23,300
Stargard, Germany	27,551
Stavanger, Norway	30,613
Stavropol, Russia in Asia	46,965
Stendal, Germany	27,263
Stettin, Germany	236,113
Stirling, Scotland	21,200
Stockholm, Sweden*	337,460
Stockport, England	108,693
Stockton-on-Tees, England	52,158
Stoke-upon-Trent, England	234,553
Stolp, Germany	33,762
Stralsund, Germany	33,988
Strassburg, Germany	167,698
Stratford, England	42,496
Stretford, England	43,000
Stryj, Austria	23,300
Stuttgart, Germany	249,286
Suchau, China	500,001
Sucre, Bolivia*	25,000
Suez, Egypt	24,970
Sumy, Russia	28,511
Sunderland, England	151,162
Superior, Wis	40,384
Surabaya, Java	146,940
Surakarta, Java	125,006
Surat, India	119,300
Sutton, England	21,275
Sutton in Ashfield, England	21,707
Sutton in Coldfield, England	20,132
Swansea, Wales	114,673
Swatow, China	48,000
Swindon, England	50,771
Swinton and Pendlebury, England	30,759
Sydney, Australia	592,100
Sydney, Canada	17,714
Syracuse, Italy	32,020
Syracuse, N. Y	137,249
Syzran, Russia	33,046
Szegedin, Hungary	102,991
Szekesfejervar, Hun	32,167
Szentes, Hungary	31,308
Tabriz, Persia	200,000
Tacoma, Wash	83,743
Taganrog, Russia	58,298
Taiwan, Formosa, Japan	48,097
Takamatsu, Japan	37,430
Takaoka, Japan	31,490
Takasaki, Japan	35,226
Talca, Chile	43,331
Tambof, Russia	49,203
Tammerfors, Finland, Russia	41,307
Tampa, Fla	37,782
Tampico, Mexico	20,000
Tamsui, Formosa, Japan	100,000
Tananarivo, Madag'r*	55,579
Tangier, Morocco	30,056
Tanjore, India	57,870
Tanta, Egypt	57,289
Taranto, Italy	60,733
Tarbes, France	26,055
Tarnopol, Austria	30,415
Tarnow, Austria	31,700
Tarragona, Spain	26,285
Tashkend, Turkestan	156,414
Taunton, England	22,563
Taunton, Mass	34,259
Tegucigalpa, Honduras*	34,692
Teheran, Persia*	280,000
Temesvar, Hungary	53,033
Teplitz, Austria	24,560
Teramo, Italy	24,563
Terni, Italy	30,641
Terre Haute, Ind	58,157
Theodosia, Russia	27,236
Thorn, Germany	46,227
Tientsin, China	750,000
Tiflis, Russia	160,645
Tilburg, Neth	47,513
Tilsit, Germany	39,013
Tipton, England	31,763
Tiraspol, Russia	29,323
Tiumen, Rus. in Asia	35,000
Tlemcen, Algeria	35,468
Tobolsk, Russia in Asia	21,401
Todmorden, England	25,455
Tokat, Turk. in Asia	60,000
Tokushima, Japan	63,710
Tokyo, Japan*	1,818,655
Toledo, Ohio	168,497
Toledo, Spain	23,393
Toluca, Mexico	29,904
Tomsk, Russia in Asia	65,530
Topeka, Kan	43,684
Toronto, Canada	376,240
Torquay, England	38,772
Torre del Greco, Italy	35,299
Torreon, Mexico	25,000
Tortosa, Spain	25,368
Totonicapam, Guatemala	28,310
Tottenham, England	137,457
Toulon, France	101,602
Toulouse, France	149,841
Tourcoing, France	79,243
Tournay, Belgium	37,976
Tours, France	72,194
Toyama, Japan	56,275
Trani, Italy	31,800
Trapani, Italy	59,452
Trebizond, Turkey in Asia	35,000
Tredegar, England	23,604
Trenton, N. J	96,815
Treves, Germany	49,112
Treviso, Italy	33,987
Trichinopoli, India	104,721
Trient, Austria	24,868
Trieste, Austria	213,306
Trikhala, Greece	21,149
Tripoli, Tripoli*	35,000
Trivandrum, India	57,882
Trondhjem, Norway	38,180
Troy, N. Y	76,813
Troyes, France	53,146
Tsaritsyn, Russia	67,650
Tsu, Japan	36,108
Tucuman, Argentina	50,000
Tula, Russia	114,733
Tunbridge Wells, Eng	35,703
Tunis, Tunis*	176,500
Turin, Italy	381,439
Turnhout, Belgium	23,613
Tver, Russia	53,544
Twickenham, Eng	29,374
Tynemouth, England	58,822
Uccle, Belgium	27,251
Udaipur, India	45,595
Udine, Italy	37,942
Ufa, Russia	49,961
Ujpest, Hungary	41,858
Ulm, Germany	51,820
Uman, Russia	31,016
Upsala, Sweden	24,150
Uralsk, Russia in Asia	38,919
Urmia, Persia	100,000
Uskup, Turkey	20,000
Utica, N. Y	74,419
Utrecht, Neth	114,692
Utsunomiya, Japan	35,953
Valence, France	26,964
Valencia, Spain	213,530
Valencia, Venezuela	40,000
Valenciennes, France	30,946
Valetta, Malta	61,268
Valladolid, Spain	68,789
Valparaiso, Chile	180,000
Vancouver, Canada	100,333
Varna, Bulgaria	33,443
Velbert, Germany	23,134
Vellore, India	43,537
Venice, Italy	176,815
Vera Cruz, Mexico	30,000
Vercelli, Italy	31,154
Verona, Italy	74,271
Versailles, France	54,982
Verviers, Belgium	47,248
Viborg, Russia	35,065
Vicenza, Italy	44,777
Victoria, Brazil	20,000
Victoria, Canada	31,620
Vienna, Austria*	2,021,052
Viersen, Germany	30,172
Villa Rica, Paraguay	30,000
Vilna, Russia	162,633
Vincennes, France	31,405
Vinnitsa, Russia	34,060
Vitebsk, Russia	66,143
Vitoria, Spain	30,701
Vittoria, Italy	32,151
Vladikavkas, Russia	49,924
Vladimir, Russia	32,029
Vladivostok, Russia in Asia	38,000
Volgoda, Russia	27,822
Volsk, Russia	27,572
Voronezh, Russia	84,146
Wakamatsu, Japan	32,534
Wakayama, Japan	68,527
Wakefield, England	51,516
Wald, Germany	25,274
Wallasey, England	78,514
Wallsend, England	41,464
Walsall, England	92,130
Walthamstow, Eng	124,597
Wandsbek, Germany	35,212
Warrington, England	72,178
Warsaw, Russia	756,426
Washington, D. C*	331,069
Waterbury, Conn	73,141
Waterford, Ireland	27,430
Waterloo with Seaforth, England	26,399
Watford, England	40,953
Wattenscheid, Ger	27,636
Wednesbury, Eng	28,108
Weimar, Germany	31,117
Weissenfels, Ger	33,581
Wellington, New Zealand*	73,697
Wenchau, China	80,000
Wesel, Germany	24,441
West Bromwich, Eng	68,345
West Ham, England	289,102
West Hartlepool, England	63,932
West Hoboken, N. J	35,403
Weston super Mare, England	23,235
Weymouth and Melcombe Regis, England	22,325
Wheeling, W. Va	41,641
Wichita, Kan	52,450
Widnes, England	31,544
Wiener Neustadt, Austria	28,700
Wiesbaden, Germany	109,002
Wigan, England	89,171
Wiju, Korea	20,000
Wilhelmshaven, Ger	35,044
Wilkes-Barre, Pa	67,105
Willesden, England	154,267
Williamsport, Pa	31,860
Wilmersdorf, Ger	109,716
Wilmington, Del	87,411
Wimbledon, England	58,876
Winchester, Eng	23,380
Windsor, Canada	17,819
Winnipeg, Canada	135,430
Winterthur, Switz	25,066
Wishaw, Scotland	25,263
Withington, England	36,201
Witten, Germany	37,450
Wittenberg, Ger	22,419
Wittenberge, Ger	20,600
Woking, England	24,810
Wolstanton United, England	27,341
Wo'verhampton, Eng	95,333
Wood Green, Eng	49,372
Woonsocket, R. I	38,125
Worcester, England	47,987
Worcester, Mass	145,986
Workington, Eng	25,099
Worksop, England	20,387
Worms, Germany	43,841
Worthing, England	30,308
Wuchang, China	800,000
Wuchau, China	53,000
Wuhu, China	122,000
Wurzburg, Germany	80,327
Yakoba, No. Nigeria	50,000
Yamagata, Japan	40,248
Yarkand, China	100,000
Yarmouth, England	55,808
Yaroslaf, Russia	71,616
Yeisk, Russia	35,446
Yezd, Persia	50,000
Yochau, China	20,000
Yokkaichi, Japan	30,140
Yokohama, Japan	326,035
Yokosuka, Japan	36,956
Yonkers, N. Y	79,803
York, England	82,297
York, Pa	44,750
Youngstown, Ohio	79,066
Zaandam, Neth	23,517
Zacatecas, Mexico	32,866
Zagazig, Egypt	35,715
Zanzibar, Zanzibar*	60,000
Zeitz, Germany	33,093
Zhitomir, Russia	80,787
Zittau, Germany	34,719
Zurich, Switzerland	175,033
Zwickau, Germany	68,502
Zwolle, Netherlands	33,051

TOTAL POPULATION OF THE UNITED STATES

1910 CENSUS

The Thirteenth Census of the United States was taken by the Bureau of the Census as of April 15, 1910. The total area enumerated includes continental United States, the territories of Alaska and Hawaii, and Porto Rico. The enumeration also includes persons stationed abroad in the military and naval service of the Government (including civilian employees, etc.), who were specially enumerated through the cooperation of the War and Navy Departments.

The following table gives the total population for the area enumerated in 1910. The corresponding census figures for 1900 are also given for purposes of comparison.

AREA	1910	1900
The United States (total area of enumeration)	93,402,151	[1] 77,256,630
Continental United States	91,972,266	75,994,575
Noncontiguous territory	1,429,885	1,262,055
Alaska	64,356	63,592
Hawaii	191,909	154,001
Porto Rico	1,118,012	[2] 953,243
Persons in military and naval service stationed abroad	55,608	91,219

[1] Includes 953,243 persons enumerated in Porto Rico in 1899.
[2] According to the census of Porto Rico taken in 1899 under the direction of the War Department.

The rate of increase from 1900 to 1910 was 20.9 per cent. for the total area of enumeration and 21 per cent. for continental United States. It should be noted that this table does not cover all the outlying possessions of the United States. Including the population of the Philippines and other possessions, the population living under the American flag is approximately as follows :

Population of the United States and possessions	101,100,000
Enumerated at the census of 1910	93,402,151
Philippine Islands, 1903	7,635,426
Guam, estimated	9,000
Samoa, estimated	6,100
Panama Canal Zone, estimated	50,000

The population of continental United States is 91,972,266. Compared with the population of 75,994,575 in 1900 this represents an increase during the past decade of 15,977,691, or 21 per cent. The rate of increase was slightly greater than during the preceding decade, 1890-1900, when it was 20.7 per cent.

STATES AND TERRITORIES

States and Territories	Population.			Per Cent of Increase	
	1910	1900	1890	1900 to 1910	1890 to 1900
Alabama	2,138,093	1,828,697	1,513,017	16.9	20.9
Arizona	204,354	122,931	59,620	66.2	106.2
Arkansas	1,574,449	1,311,564	1,128,179	20.0	16.3
California	2,377,549	1,485,053	1,203,130	60.1	22.9
Colorado	799,024	539,700	412,198	48.0	30.9
Connecticut	1,114,756	908,420	746,258	22.7	21.7
Delaware	202,322	184,735	168,493	9.5	9.6
District of Columbia	331,069	278,718	230,392	18.8	21.0
Florida	752,619	528,542	391,422	42.4	35.0
Georgia	2,609,121	2,216,331	1,837,353	17.7	20.6
Idaho	325,594	161,772	84,385	101.3	91.7
Illinois	5,638,591	4,821,550	3,826,351	16.9	26.0
Indiana	2,700,876	2,516,462	2,192,404	7.3	14.8
Iowa	2,224,771	2,231,853	1,911,896	a0.3	16.7
Kansas	1,690,949	1,470,495	1,427,096	15.0	3.0
Kentucky	2,289,905	2,147,174	1,858,635	6.6	15.5
Louisiana	1,656,388	1,381,625	1,118,587	19.9	23.5
Maine	742,371	694,466	661,086	6.9	5.0
Maryland	1,294,450	1,188,044	1,042,390	9.0	14.0
Massachusetts	3,366,416	2,805,346	2,238,943	20.0	25.3
Michigan	2,810,173	2,420,982	2,093,889	16.1	15.6
Minnesota	2,075,708	1,751,394	1,301,826	18.5	34.5
Mississippi	1,797,114	1,551,270	1,289,600	15.8	20.3
Missouri	3,293,335	3,106,665	2,679,184	6.0	16.0
Montana	376,053	243,329	132,159	54.5	84.1
Nebraska	1,192,214	1,066,300	1,058,910	11.8	0.7
Nevada	81,875	42,335	45,761	93.4	a7.5
New Hampshire	430,572	411,588	376,530	4.6	9.3
New Jersey	2,537,167	1,883,669	1,444,933	34.7	30.4
New Mexico	327,396	195,310	153,593	67.5	27.2
New York	9,113,614	7,268,894	5,997,853	25.4	21.2
North Carolina	2,206,287	1,893,810	1,617,947	16.5	17.1
North Dakota	577,056	319,146	182,719	80.8	74.7
Ohio	4,767,121	4,157,545	3,672,316	14.7	13.2
Oklahoma	1,657,155	b 790,391	b 258,657	b 109.7	b 205.6
Oregon	672,765	413,536	313,767	62.7	31.8
Pennsylvania	7,665,111	6,302,115	5,258,014	21.6	19.9
Rhode Island	542,610	428,556	345,506	26.6	24.0
South Carolina	1,515,400	1,340,316	1,151,149	13.1	16.4
South Dakota	583,888	401,570	328,808	45.4	22.1
Tennessee	2,184,789	2,020,616	1,767,518	8.1	14.3
Texas	3,896,542	3,048,710	2,235,523	27.8	36.4
Utah	373,351	276,749	207,905	34.9	33.1
Vermont	355,956	343,641	332,422	3.6	3.4
Virginia	2,061,612	1,854,184	1,655,980	11.2	12.0
Washington	1,141,990	518,103	349,390	120.4	48.3
West Virginia	1,221,119	958,800	762,794	27.4	25.7
Wisconsin	2,333,860	2,069,042	1,686,880	12.8	22.7
Wyoming	145,965	92,531	60,705	57.7	52.4
Continental U. S.	91,972,266	75,994,575	62,622,250	21.0	20.7
Alaska	64,356	63,592	32,052	1.2	98.4
Hawaii	191,909	154,001	89,990	24.6	71.1
Porto Rico	1,118,012	c 953,243	.....	....	.....
Military and Naval	55,608	91,219	.....	.....	.....
U. S. including dependencies named above	93,402,151	76,303,387	63,069,756	20.9	(d)

(a) Decrease. (b) For purposes of comparison the 1900 population figures of Oklahoma and Indian Territory are combined. (c) 1899. (d) In the last line of this table the 1900 and 1890 population figures do not include Porto Rico.

CITIES AND TOWNS OF UNITED STATES

1910 CENSUS

The following list names in alphabetical order approximately all cities in the United States having one thousand or more inhabitants. The numerals at extreme right of column are the latest available census figures or recent official estimates of population. Capitals of States and Territories are in capital letters.

ALABAMA		ALABAMA Cont'd.		ARKANSAS		ARKANSAS Cont'd.		CALIFORNIA Cont'd.	
Abbeville	1,141	McFall	1,000	Argenta	11,138	Rector	1,859	Huntington Park	1,299
Acton	1,500	Marion	1,834	Arkadelphia	2,745	Rogers	2,820	Imperial	1,257
Adger	1,200	Mobile	51,521	Arkansas City	1,485	Russellville	2,936	Inglewood	1,536
Alabama City	4,313	MONTGOMERY	38,136	Ashdown	1,247	Searcy	2,331	Irvington	1,000
Albertville	1,544	Murray	1,000	Atkins	1,258	Springdale	1,755	Jackson	2,035
Alexander City	1,710	New Decatur	6,118	Augusta	1,520	Siloam Springs	2,405	Kennett	2,500
Altoona	1,071	No. Birmingham	5,500	Batesville	3,399	Stamps	2,316	Kern	2,100
Andalusia	2,480	Oakman	1,065	Benton	1,708	Stuttgart	2,740	Keswick	2,000
Anniston	12,794	Opelika	4,734	Bentonville	3,600	Sugar Loaf	1,126	Lemoore	1,000
Ashland	1,062	Oxanna	1,500	Blackrock	1,078	Texarkana	5,655	Lincoln	1,402
Athens	1,715	Oxford	1,090	Blytheville	3,849	Van Buren	3,878	Lindsay	1,814
Atmore	1,060	Ozark	2,229	Booneville	1,631	Walnutridge	1,798	Livermore	2,030
Attalla	2,513	Phoenix	4,555	Brinkley	1,740	Warren	2,057	Lodi	2,697
Auburn	1,408	Piedmont	2,226	Camden	3,995	Wynne	2,353	Lompoc	1,482
Avondale	4,500	Pratt City	4,000	Clarendon	2,037			Longbeach	17,809
Battelle	1,600	Prattville	2,222	Clarksville	1,456	CALIFORNIA		Los Angeles	319,198
Bessemer	10,864	Roanoke	2,034	Coalhill	1,229			Los Gatos	2,232
Birmingham	132,685	Rockford	1,600	Conway	2,794	Alameda	23,383	Madera	2,404
Blocton	2,800	Russellville	2,046	Corning	1,439	Alhambra	5,021	Martinez	2,115
Blossburg	2,000	Samson	1,350	Cottonplant	1,081	Anaheim	2,628	Marysville	5,430
Boaz	1,010	Scottsboro	1,019	Crossett	2,038	Antioch	1,124	Mayfield	1,041
Brewton	2,185	Selma	13,649	Dardenelle	1,757	Angels Camp	3,900	Mendocino	1,250
Bridgeport	2,125	Sheffield	4,865	De Queen	2,018	Arcata	1,121	Merced	3,102
Brierfield	2,100	Stockton	1,400	Dermott	1,662	Auburn	2,376	Mill Valley	2,551
Brighton	1,502	Sylacauga	1,456	Desarc	1,061	Avalon	1,000	Modesto	4,034
Brookwood	1,550	Talladega	5,854	Eagle Mills	1,200	Azusa	1,477	Mokelumne Hill	1,000
Carbonhill	1,627	Tallassee	1,347	Earl	1,542	Bakersfield	12,727	Monrovia	3,576
Clanton	1,123	Thomas	1,500	Eldorado	4,202	Banning	1,000	Monterey	4,923
Clayton	1,130	Thomasville	1,181	England	1,407	Benicia	2,360	Mountain View	1,161
Columbia	1,122	Troy	4,961	Eureka Springs	3,228	Berkeley	40,434	Napa	5,791
Columbiana	1,079	Tuscaloosa	8,407	Fayetteville	4,471	Bishop	1,190	National City	1,733
Cordova	1,747	Tuscumbia	3,324	Fordyce	2,794	Black Diamond	2,372	Needles	1,500
Corona	1,500	Tuskegee	2,803	Foreman	1,000	Bodie	1,600	Nevada City	2,689
Cullman	2,130	Union Springs	4,055	Forrest City	2,484	Burlingame	1,565	Niles	1,500
Dadeville	1,193	Uniontown	1,836	Fort Smith	23,975	Chico	3,750	Oakdale	1,035
Decatur	4,228	Watson	1,000	Greenwood	1,124	Chino	1,444	Oakland	150,174
Demopolis	2,417	West End	2,500	Gurdon	1,284	Claremont	1,114	Oceanpark	3,119
Dolomite	1,000	Wetumpka	1,103	Hamburg	1,787	Coachella	1,500	Ocean View	1,000
Dothan	7,016	Whistler	3,500	Harrison	1,602	Coalinga	4,199	Ontario	4,274
East Lake	4,100	Woodlawn	3,200	Hartford	1,780	Colton	3,980	Orange	2,920
East Tallassee	2,000	Woodward	1,000	Heber Springs	1,500	Colusa	1,582	Oroville	3,859
East Thomas	1,500	Wylam	3,000	Helena	8,772	Corona	3,540	Oxnard	2,555
Elba	1,079	Yolande	1,000	Hope	3,639	Coronado	1,477	Pacific Grove	2,384
Elyton	1,000			Hot Springs	14,434	Covina	1,652	Palo Alto	4,486
Ensley	4,850	ARIZONA		Huntington	1,700	Crescent City	1,114	Pasadena	30,291
Enterprise	2,322			Huttig	1,240	Crockett	1,800	Paso Robles	1,441
Eufaula	4,259	Bisbee	9,019	Jonesboro	7,123	Downey	1,500	Pescadero	1,000
Eutaw	1,001	Casa Blanca	1,200	Junction City	1,700	Dunsmuir	1,719	Petaluma	5,880
Evergreen	1,582	Clifton	4,874	Lake Village	1,074	East San Jose	1,661	Piedmont	1,719
Florala	2,439	Congress	1,000	Leslie	1,898	El Centro	1,610	Placerville	1,914
Florence	6,689	Douglas	6,437	Lewisville	1,200	Elmhurst	1,500	Pleasanton	1,254
Fort Payne	1,317	Dunean	1,200	LITTLE ROCK	45,941	Emeryville	2,613	Plymouth	1,500
Gadsden	10,557	Flagstaff	1,633	Lonoke	1,547	Escondido	1,334	Pomona	10,207
Girard	4,214	Globe	7,083	McGehee	1,157	Eureka	11,845	Port Costa	1,000
Grasselli	1,000	Jerome	2,393	Magnolia	2,045	Folsom City	1,500	Portersville	2,696
Greensboro	2,048	Kingman	1,000	Malvern	2,778	Fort Bragg	2,408	Randsburg	1,000
Greenville	3,377	Lowell	2,500	Marianna	4,810	Fresno	24,892	Red Bluff	3,530
Guntersville	1,145	Mesa	1,692	Marked Tree	2,026	Fruitvale	5,000	Redding	3,572
Haleyville	1,111	Metcalf	2,500	Mena	3,953	Fullerton	1,725	Redlands	10,449
Hartford	1,159	Morenci	5,010	Monticello	2,274	Galt	1,150	Redondo Beach	2,935
Hartsells	1,374	Nogales	3,514	Morrillton	2,424	Gilroy	2,437	Redwood City	2,442
Headland	1,090	PHOENIX	11,134	Nashville	2,374	Glendale	2,746	Reedley	1,800
Huntsville	7,611	Pirtleville	1,500	Nettleton	1,080	Glendora	1,500	Richmond	6,802
Jackson	1,379	Prescott	5,092	Newport	3,557	Glen Ellen	1,250	Riverside	15,212
Jacksonville	2,231	St. Johns	1,250	Osceola	1,769	Grass Valley	4,520	Rocklin	1,026
Jasper	2,509	San Carlos	5,000	Ozark	1,146	Halfmoon Bay	1,500	Roseville	2,608
Jonesboro	1,979	Tempe	1,473	Paragould	5,248	Hanford	4,829	SACRAMENTO	44,696
Lafayette	1,632	Tombstone	1,582	Paris	1,497	Haywards	2,746	St. Helena	1,603
Lanett	3,820	Tucson	13,193	Piggott	1,150	Healdsburg	2,011	Salinas	3,736
Linden	1,900	Williams	1,267	Pinebluff	15,102	Highland	1,700	San Andreas	1,700
Lineville	1,053	Winslow	2,381	Pocahontas	1,547	Hollister	2,308	San Anselmo	1,531
Luverne	1,384	Yuma	2,914	Prescott	2,705	Hollywood	1,400	San Bernardino	12,779

CALIFORNIA Cont'd.	
San Diego	39,578
San Fernando	1,100
San Francisco	416,912
Sanger	2,000
San Jose	28,946
San Leandro	3,471
San Luis Obispo	5,157
San Mateo	4,384
San Pedro	6,000
San Rafael	5,934
Santa Ana	8,429
Santa Barbara	11,659
Santa Clara	4,348
Santa Cruz	11,146
Santa Maria	2,260
Santa Monica	7,847
Santa Paula	2,216
Santa Rosa	7,817
Saratoga	1,500
Sausalito	2,383
Sawtelle	2,143
Sebastopol	1,233
Selma	1,750
Sierra Madre	1,303
Soldiers Home	2,300
Sonora	2,029
South Pasadena	4,649
South San Francisco	1,989
Stockton	23,253
Sutter Creek	2,000
Taylor	1,500
Truckee	1,250
Tulare	2,758
Tuolumne	1,000
Turlock	1,573
Ukiah	2,136
Upland	2,384
Vacaville	1,177
Vallejo	11,340
Venice	5,000
Ventura	2,945
Visalia	4,550
Watsonville	4,446
Watts	1,922
Weaverville	1,100
Whittier	4,550
Willits	1,153
Willow	1,139
Woodland	3,187
Yreka	1,134
Yuba City	1,160

COLORADO

Alamosa	3,013
Aspen	1,834
Boulder	9,539
Buenavista	1,041
Canon City	5,162
Central City	1,782
Colorado City	4,333
Colorado Springs	29,078
Cripple Creek	6,206
Delta	2,388
DENVER	213,381
Durango	4,686
Eaton	1,157
Englewood	2,983
Florence	2,712
Fort Collins	8,210
Fort Logan	2,500
Fort Morgan	2,800
Glenwood Springs	2,019
Golden	2,477
Goldfield	1,112
Grand Junction	7,754
Greeley	8,179
Gunnison	1,026
Idaho Springs	2,154
Lafayette	1,892

COLORADO Cont'd	
La Junta	4,154
Lamar	2,977
Las Animas	2,008
Leadville	7,508
Littleton	1,373
Longmont	4,256
Louisville	1,706
Loveland	3,651
Manitou	1,357
Montevista	2,544
Montrose	3,254
Ouray	1,644
Paonia	1,007
Primero	2,000
Pueblo	44,395
Rockvale	1,413
Rockyford	3,230
Salida	4,425
Segundo	1,600
Silverton	2,153
South Canon	1,371
Starkville	1,000
Steamboat Sprs.	1,227
Sterling	3,044
Telluride	1,756
Trinidad	10,204
Victor	3,162
Walsenburg	2,423
Wray	1,000

CONNECTICUT

Ansonia	15,152
Avon	1,100
Bethel	3,041
Bloomfie d	1,650
Branford	2,560
Bridgeport	102,054
Bristol	9,527
Broadbrook	1,400
Brooklyn	1,750
Burlington	1,125
Central Village	1,000
Cheshire	1,500
Chester	1,300
Clinton	1,200
Collinsville	2,500
Cromwell	2,000
Danbury	20,234
Danielson	2,934
Darien	2,400
Deepriver	1,480
Derby	8,991
East Haddam	1,350
East Hampton	2,600
East Hartford	5,500
East Haven	1,250
East Norwalk	3,600
East Port Chester	2,000
Ellington	1,900
Essex	2,100
Fairfield	3,100
Forestville	3,400
Glastonbury	1,800
Greenwich	3,686
Groton	1,895
Guilford	1,608
Hamden	4,300
HARTFORD	98,915
Harwinton	1,300
Hazardville	1,200
Higganum	1,000
Huntington	1,000
Jewett City	3,023
Kensington	1,850
Lebanon	1,100
Manchester	3,600
Meriden	27,265
Milford	4,000
Middletown	11,851
Montville	1,000

CONN. Cont'd.	
Moosup	2,300
Mystic	3,900
Naugatuck	12,722
New Britain	43,916
New Canaan	1,672
New Hartford	1,500
New Haven	133,605
New London	19,659
New Milford	4,100
Niantic	1,200
Noank	1,100
Norfolk	1,350
North Grosvenor	2,500
North Haven	1,700
Norwalk	6,954
Norwich	20,367
Norwichtown	1,800
Orange	1,500
Plainfield	1,200
Plainville	2,500
Plantsville	1,800
Plymouth	2,400
Pomfret	1,100
Portland	2,300
Putnam	6,637
Ridgefield	1,114
Rockville	7,977
Roundhill	1,000
Rockyhill	1,050
Rowayton	1,150
Salisbury	2,250
Sandy Hook	1,000
Seymour	4,000
Sharon	1,000
Shelton	4,807
Simsbury	1,600
Sound Beach	1,000
So. Glastonbury	1,100
Southington	3,714
So. Manchester	9,000
So. Norwalk	8,968
Southport	1,200
South Windsor	1,075
Stafford Springs	3,059
Stonington	2,083
Stamford	25,138
Stony Creek	1,200
Stratford	4,000
Suffield	2,800
Taftville	4,500
Terryville	2,400
Thomaston	3,200
Thompsonville	6,000
Tolland	1,400
Torrington	15,483
Union City	3,200
Unionville	2,200
Wallingford	8,690
Warehouse Point	1,250
Waterbury	73,141
Waterford	2,550
Watertown	3,400
Waterville	3,000
West Hartford	3,000
West Haven	8,543
Westport	3,200
Wethersfield	2,750
Willimantic	11,230
Windsor	2,600
Windsor Locks	3,500
Winsted	7,754
Woodbury	1,000
Yalesville	1,500

DELAWARE

Delaware City	1,132
DOVER	3,720
Georgetown	1,609
Harrington	1,500

DELAWARE Cont'd.	
Henry Clay Factory	1,000
Laurel	2,166
Lewes	2,158
Middletown	1,399
Milford	2,603
Milton	1,038
Newark	1,913
Newcastle	3,351
Seaford	2,108
Smyrna	1,843
Wilmington	87,411

DISTRICT OF COLUMBIA

Washington	331,069

FLORIDA

Apalachicola	3,065
Arcadia	1,736
Bartow	2,662
Bradentown	1,886
Chipley	1,099
Clearwater	1,171
Dade City	1,060
Daytona	3,082
De Funiak Sprs.	2,017
De Land	2,812
Dunnellon	1,227
Fernandina	3,482
Fort Meade	1,165
Fort Myers	2,463
Fort Pierce	1,333
Gainesville	6,183
Greencove Sprs.	1,319
High Springs	1,468
Jacksonville	57,699
Jasper	1,730
Key West	19,945
Kissimmee	2,157
Lake City	5,032
Lakeland	3,719
Liveoak	3,450
Madison	1,560
Marianna	1,915
Miami	5,471
Millville	1,200
Monticello	1,829
Mulberry	1,418
New Augustine	1,284
New Smyrna	1,121
Ocala	4,370
Orlando	3,894
Palatka	3,779
Pensacola	22,982
Perry	1,012
Plant City	2,481
Port Tampa City	1,343
Punta Gorda	1,012
Quincy	3,204
Saint Augustine	5,494
Saint Petersburg	4,127
Sanford	3,570
SouthJacksonville	1,147
Starke	1,135
TALLAHASSEE	5,018
Tampa	37,782
Tarpon Springs	2,212
Warrington	2,200
Wauchula	1,099
West Palm Beach	1,743
West Tampa	8,258
White Springs	1,177

GEORGIA

Abbeville	1,201
Acworth	1,043
Adel	1,092

GEORGIA Cont'd	
Albany	8,190
Americus	8,063
Aragon	1,200
Arlington	1,308
Ashburn	2,214
Athens	14,913
ATLANTA	154,839
Augusta	41,040
Bainbridge	4,217
Barnesville	3,068
Blackshear	1,235
Blakely	1,838
Boston	1,130
Broxton	1,040
Brunswick	10,182
Buenavista	1,016
Buford	1,683
Cairo	1,505
Calhoun	1,652
Camilla	1,827
Canton	2,002
Carrollton	3,297
Cartersville	4,067
Cedartown	3,551
Chattahoochee	1,000
Claxton	1,008
Cochran	1,638
Collegepark	2,173
Columbus	20,554
Commerce	2,238
Convers	1,919
Cordele	5,883
Cornelia	1,114
Covington	2,967
Cuthbert	3,210
Dallas	1,259
Dalton	5,324
Darien	1,391
Dawson	3,827
Decatur	2,466
Douglas	3,550
Douglasville	1,462
Dublin	5,795
Eastman	2,355
East Point	3,682
Eatonton	2,036
Edgewood	2,600
Elberton	6,483
Fairburn	1,395
Fitzgerald	5,795
Forsyth	2,208
Fort Gaines	1,320
Fort Valley	2,697
Gainesville	5,925
Grantville	1,132
Greensboro	2,120
Griffin	7,478
Hampton	1,093
Harrisonville	1,882
Hartwell	2,007
Hawkinsville	3,420
Hazlehurst	1,181
Hogansville	1,230
Jackson	1,862
Jefferson	1,207
Jesup	1,415
Kirkwood	1,226
Lafayette	1,590
Lagrange	5,587
Lavonia	1,712
Lawrenceville	1,518
Lindale	2,650
Lithonia	1,428
Louisville	1,039
Lumber City	1,195
Lumpkin	1,140
McCaysville	1,253
McRae	1,160
Macon	40,665
Madison	2,412

GEORGIA Cont'd.	
Marietta	5,949
Marshallville	1,082
Milledgeville	4,385
Millen	2,030
Millhaven	1,000
Milltown	1,247
Monroe	3,029
Montezuma	1,630
Monticello	1,508
Moultrie	3,349
New Holland	2,000
Newnan	5,548
Ocilla	2,017
Pelham	1,880
Porterdale	1,000
Quitman	3,915
Richland	1,250
Rockmart	1,034
Rome	12,099
Rossville	1,059
Roswell	1,158
Royston	1,422
Sandersville	2,641
Savannah	65,064
Senoia	1,111
Social Circle	1,590
Sparta	1,715
Statesboro	2,529
Stone Mountain	1,062
Summerville	4,361
Swainsboro	1,313
Sylvania	1,400
Sylvester	1,447
Talbotton	1,081
Tallapoosa	2,117
Tennille	1,622
Thomaston	1,645
Thomasville	6,727
Thomson	2,151
Tifton	2,381
Toccoa	3,120
Trion	1,721
Unadilla	1,003
Unionpoint	1,363
Valdosta	7,656
Vidalia	1,776
Vienna	1,564
Warrenton	1,368
Washington	3,065
Waycross	14,485
Waynesboro	2,729
Westpoint	1,906
Winder	2,443
Wrightsville	1,389

IDAHO	
Blackfoot	2,202
BOISE	17,358
Bonners Ferry	1,071
Burke	1,400
Caldwell	3,543
Coeur d'Alene	7,291
Emmett	1,351
Gooding	1,444
Grangeville	1,534
Hailey	1,231
Idaho Falls	4,827
Kellogg	1,273
Lewiston	6,043
Malad City	1,303
Meridian	1,000
Montpelier	1,924
Moscow	3,670
Mountain Home	1,411
Mullan	1,667
Nampa	4,205
Paris	1,038
Payette	1,948
Pocatello	9,110
Potlatch	1,500

IDAHO Cont'd.	
Preston	2,110
Rexburg	1,893
Rossfork	1,400
Saint Anthony	1,238
Salmon	1,434
Sandpoint	2,993
Shoshone	1,155
Silver City	1,300
Twin Falls	5,258
Wallace	3,000
Wardner	1,369
Weiser	2,600

ILLINOIS	
Abingdon	2,464
Albion	1,281
Aledo	2,144
Altamont	1,328
Alton	17,528
Amboy	1,749
Anna	2,809
Arcola	2,100
Arlington Hgts	1,943
Arthur	1,080
Ashland	1,096
Assumption	1,918
Astoria	1,357
Athens	1,340
Atlanta	1,367
Auburn	1,814
Augusta	1,146
Aurora	29,807
Averyville	2,668
Barrington	1,444
Barry	1,647
Bartonville	1,200
Batavia	4,436
Beardstown	6,107
Belleville	21,122
Belvidere	7,253
Bement	1,530
Benld	1,912
Benton	2,675
Berwyn	5,841
Bloomington	25,768
Blue Island	8,043
Bradley	1,942
Braidwood	1,958
Breese	2,128
Bridgeport	2,703
Brookfield	2,186
Brooklyn	1,569
Brookport	1,443
Bunker Hill	1,046
Bushnell	2,619
Cairo	14,548
Cambridge	1,272
Camp Point	1,148
Canton	10,453
Carbondale	5,411
Cardiff	1,031
Carlinville	3,616
Carlyle	1,982
Carmi	2,833
Carpentersville	1,128
Carriers Mills	1,558
Carrollton	2,323
Carterville	2,971
Carthage	2,373
Casey	2,157
Central City	1,179
Centralia	9,680
Champaign	12,421
Charleston	5,884
Chatsworth	1,112
Chenoa	1,314
Cherry	1,048
Chester	2,747
Chicago	2,185,283

ILLINOIS Cont'd.	
Chicago Hgts	14,525
Chillicothe	1,851
Chrisman	1,193
Christopher	1,825
Cicero	14,557
Clinton	5,165
Clyde	1,000
Coal City	2,667
Colchester	1,445
Collinsville	7,478
Columbia	2,076
Crotty	1,005
Crystallake	1,242
Cuba	2,019
Dallas City	1,288
Danville	27,871
Decatur	31,140
De Kalb	8,102
Delavan	1,175
Depue	1,339
Des Plaines	2,348
Divernon	1,519
Dixon	7,216
Dolton Station	1,869
Dorrisville	1,184
Downers Grove	2,601
Dundee	4,100
Duquoin	5,454
Dwight	2,156
Earlville	1,059
East Dubuque	1,253
East Dundee	1,405
East Moline	2,665
East Peoria	1,493
East St. Louis	58,547
Edwardsville	5,014
Effingham	3,898
Eldorado	3,366
Elgin	25,976
Elmhurst	2,360
Elmwood	1,390
El Paso	1,470
Equality	1,180
Eureka	1,525
Evanston	24,978
Fairbury	2,505
Fairfield	2,479
Farmer City	1,603
Farmington	2,421
Flora	2,704
Forest Park	6,594
Fort Sheridan	1,800
Freeburg	1,397
Freeport	17,567
French Village	1,000
Fulton	2,174
Galena	4,835
Galesburg	22,089
Galva	2,498
Geneseo	3,199
Geneva	2,451
Genoa	1,257
Georgetown	2,307
Gibson City	2,086
Gillespie	2,241
Gilman	1,305
Girard	1,891
Glen Carbon	1,220
Glencoe	1,899
Glenellyn	1,763
Golconda	1,088
Grafton	1,116
Granite City	9,903
Granville	1,391
Grayville	1,940
Greenfield	1,161
Greenup	1,224
Griggsville	3,178
Grossdale	1,262

ILLINOIS Cont'd.	
Gross Point	1,008
Hamilton	1,627
Harrisburg	5,309
Harvard	3,008
Harvey	7,227
Havana	3,525
Henry	1,687
Herrin	6,861
Highland	2,675
Highland Park	4,209
Highwood	1,219
Hillsboro	3,424
Hinsdale	2,451
Homer	1,086
Hoopeston	4,698
Jacksonville	15,326
Jerseyville	4,113
Johnston City	3,248
Joliet	34,670
Jonesboro	1,169
Kankakee	13,986
Keithsburg	1,515
Kewanee	9,307
Knoxville	1,818
Lacon	1,495
Ladd	1,910
Lagrange	5,282
Lagrange Park	1,131
Laharpe	1,349
Lake Forest	3,349
Lanark	1,175
Lansing	1,060
La Salle	11,537
Lawrenceville	3,235
Lebanon	1,907
Lemont	2,284
Lena	1,168
Leroy	1,702
Lewistown	2,312
Lexington	1,318
Libertyville	1,724
Lincoln	10,892
Litchfield	5,971
Livingston	1,092
Lockport	2,555
Lovejoy	1,500
Lovington	1,011
Lyons	1,483
McHenry	1,031
McLeansboro	1,796
Macomb	5,774
Madison	5,046
Manteno	1,229
Marengo	1,936
Marion	7,093
Marissa	2,004
Mark	1,025
Maroa	1,160
Marseilles	3,291
Marshall	2,569
Martinsville	1,500
Mascoutah	2,081
Mason City	1,842
Mattoon	11,456
Maywood	8,033
Melrose Park	4,806
Mendota	3,806
Metropolis	4,655
Milford	1,316
Millstadt	1,140
Minonk	2,070
Moline	24,199
Momence	2,201
Monmouth	9,128
Monticello	1,981
Morgan Park	3,694
Morris	4,563
Morrison	2,410
Morrisonville	1,126
Morton	1,004

ILLINOIS Cont'd.	
Morton Park	1,000
Mound City	2,837
Mounds	1,686
Mount Carmel	6,934
Mount Carroll	1,759
Mount Morris	1,132
Mount Olive	3,501
Mount Pulaski	1,511
Mount Sterling	1,986
Mount Vernon	8,007
Moweaqua	1,513
Murphysboro	7,485
Naperville	3,449
Nashville	2,135
National Stock Yards	2,700
Nauvoo	1,020
Neoga	1,074
New Athens	1,131
New Baden	1,372
Newman	1,264
Newton	2,108
Nokomis	1,872
Normal	4,024
Norris City	1,055
North Alton	1,200
North Chicago	3,306
Oakland	1,159
Oak Park	19,444
Oblong	1,482
Odell	1,035
Odin	1,400
O'Fallon	2,018
Oglesby	3,600
Olney	5,011
Onarga	1,273
Oregon	2,180
Ottawa	9,535
Palatine	1,144
Palestine	1,399
Pana	6,055
Paris	7,664
Park Ridge	2,009
Pawnee	1,399
Paxton	2,912
Pecatonica	1,022
Pekin	9,897
Peoria	66,950
Peotone	1,207
Percy	1,033
Peru	7,984
Petersburg	2,587
Pinckneyville	2,722
Pittsfield	2,095
Plainfield	1,019
Plano	1,627
Polo	1,829
Pontiac	6,090
Portland	3,194
Princeton	4,131
Prophetstown	1,083
Quincy	36,587
Rantoul	1,384
Redbud	1,240
Ridgway	1,054
River Forest	2,456
Riverside	1,702
Riverton	1,911
Roanoke	1,311
Robinson	3,863
Rochelle	2,732
Rockdale	1,101
Rockfalls	2,657
Rockford	45,401
Rock Island	24,335
Roodhouse	2,171
Rossville	1,422
Rushville	2,422
St. Anne	1,065
St. Charles	4,046

ILLINOIS Cont'd.		INDIANA Cont'd.		INDIANA Cont'd.		INDIANA Cont'd.		IOWA Cont'd.	
St. Elmo	1,227	Angola	2,610	INDIANAPOLIS	233,650	Rosedale	1,166	Cincinnati	1,355
St. Francisville	1,391	Argos	1,088	Irvington	1,500	Rushville	4,925	Clarinda	3,832
Salem	2,669	Attica	3,335	Jasonville	3,295	St. Paul	1,400	Clarion	2,065
Sandoval	1,563	Auburn	3,919	Jasper	2,196	Salem	2,283	Clear Lake	2,014
Sandwich	2,557	Aurora	4,410	Jeffersonville	10,412	Scottsburg	1,669	Clinton	25,577
Savanna	3,691	Batesville	2,151	Jonesboro	1,573	Seelyville	1,188	Colfax	2,524
Seatonville	1,370	Bedford	8,716	Kendallville	4,981	Seymour	6,305	Columbus Jc.	1,185
Seneca	2,100	Berne	1,316	Kentland	1,209	Shelburn	2,055	Coon Rapids	1,084
Sesser	1,292	Bicknell	2,794	Knightstown	2,008	Shelbyville	9,500	Corning	1,702
Shawneetown	1,863	Bloomfield	2,069	Knightsville	1,081	Sheridan	1,768	Corydon	1,669
Sheffield	1,009	Bloomington	8,838	Knox	1,644	Shirley	1,519	Council Bluffs	29,292
Shelbyville	3,590	Bluffton	4,987	Kokomo	17,010	Shoals	1,015	Cresco	2,658
Sheldon	1,143	Boonville	3,934	Ladoga	1,148	South Bend	53,684	Creston	6,924
Silvis	1,163	Bourbon	1,163	Lafayette	20,081	South Whitley	1,176	Davenport	43,028
Sorento	1,018	Brazil	9,340	Lagrange	1,772	Spencer	2,150	Decorah	3,592
South Holland	1,065	Bremen	2,008	Lapel	1,045	Sullivan	4,115	Denison	3,133
South Wilmington	2,403	Brook	1,067	Laporte	10,525	Summitville	1,387	DES MOINES	86,368
Sparta	3,081	Brookville	2,169	Lawrenceburg	3,930	Syracuse	1,379	De Witt	1,634
SPRINGFIELD	51,678	Brownstown	1,492	Lebanon	5,474	Tell City	3,369	Dubuque	38,494
Spring Valley	7,035	Butler	1,818	Liberty	1,338	Terre Haute	58,157	Douds Leando	1,000
Staunton	5,048	Cambridge City	2,237	Ligonier	2,173	Thorntown	1,508	Dunlap	1,155
Steger	2,161	Cannelton	2,130	Linton	5,906	Tipton	4,075	Dyersville	1,511
Sterling	7,467	Centerville	1,019	Logansport	19,050	Tolleston	1,000	Eaglegrove	3,387
Stockton	1,096	Chesterton	1,400	Loogootee	2,154	Union City	3,209	Eddyville	1,085
Stonington	1,118	Clarksville	2,743	Lowell	1,235	Upland	1,080	Eldon	2,024
Streator	14,253	Clay City	1,213	Madison	6,934	Valparaiso	6,987	Eldora	1,995
Sullivan	2,621	Clinton	6,229	Marion	19,359	Van Buren	1,189	Elkader	1,181
Sumner	1,413	Columbia City	3,448	Martinsville	4,529	Veedersburg	1,757	Emmetsburg	2,325
Sycamore	3,926	Columbus	8,813	Mecca	1,200	Vevay	1,256	Estherville	3,404
Taylorville	5,446	Connersville	7,738	Michigan City	19,027	Vincennes	14,895	Fairfield	4,970
Thayer	1,012	Converse	1,164	Middletown	1,174	Wabash	8,687	Farmington	1,165
Thornton	1,030	Corydon	1,703	Mishawaka	11,886	Wadesville	1,000	Fayette	1,112
Toluca	2,407	Covington	2,069	Mitchell	3,438	Walkerton	1,003	Forest City	1,691
Toulon	1,208	Crawfordsville	9,371	Monon	1,184	Warren	1,189	Fort Dodge	15,543
Tower Hill	1,040	Crothersville	1,038	Montezuma	1,537	Warsaw	4,430	Fort Madison	8,900
Trenton	1,694	Crown Point	2,526	Monticello	2,168	Washington	7,854	Garner	1,028
Troy	1,447	Danville	1,640	Montpelier	2,786	Waterloo	1,167	Glenwood	4,052
Tuscola	2,453	Decatur	4,471	Mooresville	1,608	West Lafayette	3,867	Grand Junction	1,012
Upper Alton	2,918	Delphi	2,161	Mt. Vernon	5,563	West Terre Haute	3,083	Greene	1,150
Urbana	8,245	Diamond	1,070	Muncie	24,005	Whiting	6,587	Greenfield	1,379
Utica	1,500	Dugger	1,226	Nappanee	2,260	Williamsport	1,243	Grinnell	5,036
Vandalia	2,974	Dunkirk	3,031	National Military Home	2,300	Winamac	1,607	Grundy Center	1,354
Venice	3,718	East Chicago	19,098	New Albany	20,629	Winchester	4,266	Guthrie Center	1,337
Vermont	1,118	Eaton	1,428	Newburg	1,097	Winona Lake	1,000	Guttenberg	1,873
Vienna	1,124	Edinburg	2,040	Newcastle	9,446	Worthington	1,732	Hamburg	1,817
Villa Grove	1,828	Elkhart	19,282	New Harmony	1,229	Yorktown	1,100	Hampton	2,617
Virden	4,000	Elwood	11,028	New Haven	1,038			Harlan	2,570
Virginia	1,501	Evansville	69,647	Noblesville	5,073	IOWA		Hartley	1,106
Warren	1,331	Ewing	2,500	Normal City	1,122			Hawarden	2,107
Warsaw	2,254	Fairmount	2,506	North Judson	1,143	Ackley	1,244	Hiteman	1,200
Washington	1,530	Farmersburg	1,115	North Manchester	2,428	Adel	1,289	Hocking	1,400
Waterloo	2,091	Flora	1,386	No. Vernon	2,915	Afton	1,014	Humboldt	1,809
Watseka	2,476	Fort Branch	1,182	Notre Dame	1,200	Akron	1,130	Humeston	1,006
Waukegan	16,069	Fortville	1,174	Oakland City	2,370	Albia	4,969	Idagrove	1,874
Waverly	1,538	Fort Wayne	63,933	Odon	1,064	Algona	2,908	Independence	3,517
Wenona	1,442	Fowler	1,491	Oolitic	1,079	Alton	1,046	Indianola	3,283
West Chicago	2,378	Frankfort	8,634	Orleans	1,367	Ames	4,223	Iowa City	10,091
West Dundee	1,380	Franklin	4,502	Osgood	1,169	Anamosa	2,983	Iowa Falls	2,797
West Frankfort	2,111	Frenchlick	1,803	Owensville	1,237	Anita	1,118	Jefferson	2,477
West Hammond	4,948	Garrett	4,149	Oxford	1,010	Atlantic	4,560	Keokuk	14,008
Westville	2,607	Gary	16,802	Paoli	1,278	Audubon	1,928	Keosauqua	1,009
Wethersfield	1,593	Gas City	3,224	Pendleton	1,293	Avoca	1,520	Knoxville	3,190
Wheaton	3,423	Geneva	1,140	Peru	10,910	Bedford	1,883	Lake City	2,043
Whitehall	2,854	Goodland	1,105	Petersburg	2,170	Bellevue	1,776	Lake Mills	1,214
Willisville	1,082	Goshen	8,514	Plainfield	1,303	Belmond	1,224	Lamoni	1,541
Wilmette	4,943	Greencastle	3,790	Plymouth	3,838	Boone	10,347	Lansing	1,542
Wilmington	1,450	Greenfield	4,448	Portland	5,130	Britt	1,303	Laporte City	2,028
Winchester	1,639	Greensburg	5,420	Port Fulton	1,060	Brooklyn	1,233	Lemars	4,157
Winnetka	3,168	Greentown	1,166	Portland	6,448	Burlington	24,324	Lenox	1,274
Witt	2,170	Greenwood	1,608	Princeton	1,714	Buxton	3,000	Leon	1,991
Woodstock	4,331	Hammond	20,925	Redkey	2,393	Carroll	3,546	Logan	1,453
Worden	1,082	Harmony	1,200	Rensselaer	2,303	Cascade	1,268	Lyons, Pop. inc. in Clinton	
Wyoming	1,506	Hartford City	6,187	Richmond	22,324	Cedar Falls	5,012	McGregor	1,259
Zion City	4,789	Hobart	1,753	Ridgeville	1,302	Cedar Rapids	32,811	Madrid	1,191
		Hope	1,223	Rising Sun	1,513	Centerville	6,936	Malvern	1,154
INDIANA		Howell	2,100	River Park	1,505	Chariton	3,794	Manchester	2,758
Albany	1,289	Huntingburg	2,464	Rochester	3,364	Charles City	5,892	Manning	1,434
Albion	1,213	Huntington	10,272	Rockport	2,736	Cherokee	4,884	Manson	1,236
Alexandria	5,096	Hymera	1,515	Rockville	1,943			Mapleton	1,100
Anderson	22,476	Indiana Harbor	4,850						

IOWA Cont'd.		KANSAS		KANSAS Cont'd.		KENTUCKY Cont'd.		KENTUCKY Cont'd.	
Maquoketa	3,570	Abilene	4,118	Leavenworth	19,363	Central City	2,545	Stanford	1,532
Marengo	1,786	Alma	1,010	Liberal	1,716	Clay	1,098	Sturgis	1,467
Marion	4,400	Altoona	1,462	Lincoln	1,508	Clinton	1,497	Uniontown	1,356
Marshalltown	13,374	Anthony	2,069	Lindsborg	1,939	Cloverport	1,403	Vanceburg	1,145
Mason City	11,230	Argentine	4,850	Lyons	2,071	Columbia	1,022	Versailles	2,268
Missouri Valley	3,187	Arkansas City	7,508	McPherson	3,546	Corbin	2,589	West Covington	1,751
Montezuma	1,172	Atchison	16,429	Manhattan	5,722	Covington	53,270	Williamsburg	2,004
Monticello	2,043	Augusta	1,235	Mankato	1,155	Cynthiana	3,603	Wilmore	1,000
Moulton	1,233	Baldwin	1,386	Marion	1,841	Danville	5,420	Winchester	7,156
Mountayr	1,646	Baxter Springs	1,598	Marysville	2,260	Dawson Springs	1,350		
Mt. Pleasant	3,874	Belleville	2,224	Medicine Lodge	1,229	Dayton	6,979	LOUISIANA	
Mt. Vernon	1,532	Beloit	3,082	Mineral	1,770	Drakesboro	1,126	Abbeville	2,907
Muscatine	16,178	Blue Rapids	1,756	Minneapolis	1,895	Earlington	3,931	Albemarle	1,200
Mystic	2,663	Bonner Springs	1,462	Mulvane	1,084	Eddyville	1,442	Alexandria	11,213
Nashua	1,107	Burlingame	1,422	National Military Home	2,500	Elizabethtown	1,970	Amite	1,677
Nevada	2,138	Burlington	2,180	Neodesha	2,872	Elkton	1,228	Arcadia	1,079
New Hampton	2,275	Burroak	1,132	Newton	7,862	Eminence	1,274	Baldwin	1,000
New London	1,144	Caldwell	2,205	Nickerson	1,195	Falmouth	1,180	BATON ROUGE	14,897
New Sharon	1,122	Caney	3,597	Norton	1,787	Flemingsburg	1,219	Bayou Goula	1,000
Newton	4,616	Chanute	9,272	Oakland	1,465	FRANKFORT	10,465	Belle Alliance	1,000
Northwood	1,264	Cherokee	1,452	Oberlin	1,157	Franklin	3,063	Berwick	2,183
Oakland	1,105	Cherryvale	4,304	Olathe	3,272	Fulton	2,575	Bogalusa	1,850
Odebolt	1,283	Chetopa	1,548	Osage City	2,432	Georgetown	4,533	Bowie	1,200
Oelwein	6,028	Chicopee	1,700	Osawatomie	4,046	Glasgow	2,316	Breaux Bridge	1,339
Ogden	1,298	Clay Center	3,438	Osborne	1,566	Greenville	1,604	Bunkie	1,765
Onawa	2,026	Clyde	1,057	Oswego	2,713	Guthrie	1,096	Colfax	1,049
Orange City	1,374	Coffeyville	12,687	Ottawa	7,650	Harrodsburg	3,147	Covington	2,601
Osage	2,445	Colby	1,130	Paola	3,207	Hawesville	1,002	Crowley	5,099
Osceola	2,416	Columbus	3,064	Parsons	12,463	Henderson	11,452	De Ridder	2,100
Oskaloosa	9,466	Concordia	4,415	Peabody	1,416	Hickman	2,736	Donaldsonville	4,090
Ottumwa	22,012	Conway Springs	1,292	Phillipsburg	1,302	Highland Park	1,977	Eunice	1,684
Panora	1,080	Council Grove	2,545	Pittsburg	14,755	Hopkinsville	9,419	Franklin	3,857
Pella	3,021	Dodge City	3,214	Plainville	1,090	Jackson	1,346	Fullerton	1,238
Perry	4,630	Downs	1,427	Pleasanton	1,373	Lagrange	1,152	Garyville	1,000
Redoak	4,830	Eldorado	3,129	Pratt	3,302	Lancaster	1,507	Gibsland	1,065
Reinbeck	1,205	Ellis	1,404	Rosedale	5,960	Latonia	3,000	Gretna	3,700
Remsen	1,076	Ellsworth	2,041	Russell	1,692	Lawrenceburg	1,723	Gueydan	1,081
Rock Rapids	2,005	Empire City	1,000	Sabetha	1,768	Lebanon	3,077	Hammond	2,942
Rock Valley	1,198	Emporia	9,058	St. John	1,785	Leitchfield	1,053	Homer	1,855
Rockwell City	1,528	Erie	1,300	St. Marys	1,397	Lexington	35,099	Houma	5,024
Sac City	2,201	Eureka	2,333	Salina	9,688	Livermore	1,220	Independence	1,004
Sanborn	1,174	Florence	1,168	Scammon	2,233	London	1,638	Jackson	2,146
Seymour	2,290	Fort Leavenworth	2,500	Sedan	1,211	Louisa	1,356	Jeanerette	2,206
Sheldon	2,941	Fort Riley	3,500	Seneca	1,806	Louisville	223,928	Jennings	3,925
Shenandoah	4,976	Fort Scott	10,463	Smith Center	1,292	Ludlow	4,163	Jonesboro	1,134
Sibley	1,330	Frankfort	1,426	Stafford	1,927	Madisonville	4,966	Kenner	1,500
Sidney	1,019	Fredonia	3,040	Sterling	2,133	Marion	1,627	Kentwood	3,609
Sigourney	2,032	Frontenac	3,396	Stockton	1,317	Mayfield	5,916	Lafayette	6,392
Sioux Center	1,064	Galena	6,096	Syracuse	1,126	Maysville	6,141	Lake Arthur	1,093
Sioux City	47,828	Garden City	3,171	Tonganoxie	1,018	Mercer	1,200	Lake Charles	11,449
Spencer	3,005	Garnett	2,334	TOPEKA	43,684	Middlesboro	7,305	Lake Providence	1,568
Spirit Lake	1,162	Gas	1,281	Valley Falls	1,129	Monticello	1,338	Lecompte	1,058
Storm Lake	2,428	Girard	2,446	Victoria	1,500	Morehead	1,105	Leesville	2,043
Story City	1,387	Goodland	1,993	Wamego	1,714	Morganfield	2,725	Lutcher	1,800
Strawberry Pt	1,052	Greatbend	4,622	Washington	1,547	Mortons Gap	1,266	McDonoghville	2,700
Stuart	1,826	Greensburg	1,199	Weir	2,289	Mt. Sterling	3,932	Madisonville	1,028
Sumner	1,404	Halstead	1,004	Wellington	7,034	Mt. Washington	1,400	Mandeville	1,166
Tama	2,290	Hanover	1,039	West Mineral	2,000	Murray	2,089	Mansfield	1,799
Tipton	2,048	Harper	1,638	Whitecloud	1,119	Newport	30,309	Marksville	1,076
Toledo	1,626	Hays	1,961	Wichita	52,450	Nicholasville	2,935	Mathews	1,300
Traer	1,373	Herington	3,273	Winfield	6,700	Oakdale	2,073	Melville	1,093
Valley Junction	2,573	Hiawatha	2,974	Yates Center	2,024	Olive Hill	1,132	Minden	3,002
Villisca	2,039	Hillsboro	1,134	KENTUCKY		Owensboro	16,011	Monroe	10,209
Vinton	3,336	Hoisington	1,975			Owenton	1,024	Morgan City	5,477
Wapello	1,326	Holton	2,842	Ashland	8,688	Paducah	22,760	Napoleonville	1,201
Washington	4,380	Horton	3,600	Augusta	1,787	Paris	5,859	Natchitoches	2,532
Waterloo	26,693	Howard	1,163	Barbourville	1,633	Pikeville	1,280	New Iberia	7,499
Waukon	2,025	Humboldt	2,548	Bardstown	2,126	Pineville	2,161	New Orleans	339,075
Waverly	3,205	Hutchinson	16,364	Bardwell	1,087	Pollard	1,500	New Roads	1,352
Webster City	5,208	Independence	10,480	Beattyville	1,360	Prestonsburg	1,120	Opelousas	4,623
West Burlington	1,206	Iola	9,032	Bellevue	6,683	Princeton	3,015	Patterson	2,998
West Liberty	1,666	Junction City	5,598	Berea	1,510	Providence	2,084	Pineville	1,212
West Union	1,652	Kansas City	82,331	Bowling Green	9,173	Richmond	5,340	Plaquemine	4,955
Whatcheer	1,720	Kingman	2,570	Burnside	1,117	Russell	1,038	Ponchatoula	1,055
Williamsburg	1,060	Kinsley	1,547	Cadiz	1,005	Russellville	3,111	Rayne	2,247
Wilton Junction	1,157	Kiowa	1,520	Campbellsville	1,206	Scottsville	1,327	Rayville	1,079
Winterset	2,818	Laharpe	2,080	Carlisle	1,293	Sebree	1,500	Ruston	3,377
Woodbine	1,538	Larned	2,911	Carrollton	1,906	Shelbyville	3,412	St. Martinville	2,318
		Lawrence	12,374	Catlettsburg	3,520	Somerset	4,491	Shreveport	28,015
						Springfield	1,329	Slidell	2,188

LOUISIANA Cont'd.	
Thibodaux	3,824
Vidalia	1,345
Washington	1,528
Welsh	1,250
Westlake	1,700
West Monroe	1,127
Whitecastle	2,289
Winnfield	2,925
Yellow Pine	1,000

MAINE

Ashland	1,500
Auburn	15,064
AUGUSTA	13,211
Bangor	24,803
Bar Harbor	3,000
Bath	9,396
Belfast	4,618
Berwick	2,000
Biddeford	17,079
Bluehill	1,100
Boothbay Harbor	1,800
Bowdoinham	1,200
Brewer	5,667
Bridgton	1,474
Brownville	1,300
Brunswick	5,341
Bucksport	1,800
Calais	6,116
Camden	2,900
Cape Jellison	1,200
Caribou	4,700
Cherryfield	1,400
Clinton	1,200
Corinna	1,100
Cumberland Mills	2,500
Danforth	1,200
Deer Isle	1,600
Dexter	3,200
Dover	1,800
East Machias	1,300
Eastport	4,961
Ellsworth	3,549
Fairfield	2,801
Farmington	1,240
Fort Fairfield	1,620
Fort Kent	3,000
Foxcroft	1,800
Gardiner	5,311
Gorham	2,200
Greenville	1,200
Guilford	1,600
Hallowell	2,864
Hampden	1,500
Hartland	1,100
Hodgdon	1,100
Houlton	5,700
Island Falls	1,600
Jonesport	1,600
Kennebunk	2,500
Kennebunkport	2,400
Kittery	2,600
Lewiston	26,247
Lincoln	1,167
Lisbon	1,600
Lisbon Falls	2,300
Livermore Falls	2,200
Lubec	3,100
Machias	2,000
Machiasport	1,100
Madison	2,408
Mars Hill	1,500
Mechanic Falls	1,600
Millbridge	1,475
Millinocket	3,200
Milltown	1,500
Milo	2,400
Monticello	1,200
Newport	1,650
Norridgewock	1,500
North Anson	1,200
North Berwick	1,900
Norway	2,215
Oakland	2,100
Oldtown	6,317
Orono	3,400
Pittsfield	2,231
Portland	58,571
Presque Isle	2,938
Princeton	1,000
Randolph	1,000
Richmond	1,650
Rockland	8,174
Rockport	1,600
Rumford Falls	5,427
Sabattus	1,200
Saco	6,583
Sanford	6,800
Searsport	1,250
Skowhegan	5,200
Solon	1,000
South Berwick	2,700
South Paris	1,542
South Portland	7,471
South Windham	1,200
Springvale	2,000
Stonington	1,900
Tenants Harbor	1,700
Thomaston	2,100
Topsham	1,700
Upper Madawaska	1,400
Vanburen	3,000
Vinalhaven	2,200
Waldoboro	2,200
Warren	1,400
Waterville	11,458
Wells	1,200
Westbrook	8,281
Wilton	1,000
Winslow	1,000
Winterport	1,300
Winthrop	1,500
Yarmouthville	1,600
York Harbor	1,200
York Village	1,100

MARYLAND

ANNAPOLIS	8,609
Arlington	1,000
Baltimore	558,485
Barton	2,000
Belair	1,005
Berlin	1,317
Brooklyn	1,200
Brunswick	3,721
Carroll	2,000
Cambridge	6,407
Catonsville	4,500
Centerville	1,435
Chesapeake City	1,016
Chestertown	2,735
Cockeysville	1,500
Crisfield	3,468
Cumberland	21,839
Deal Island	2,000
Denton	1,481
Easton	3,083
Eastport	1,500
Eckhart Mines	1,700
Elk Ridge	1,000
Elkton	2,487
Ellicott City	1,151
Emmitsburg	1,054
Federalsburg	1,050
Fords Store	1,200
Frederick	10,411
Frostburg	6,028

MARYLAND Cont'd.	
Govanstown	1,500
Hagerstown	16,507
Hamilton	1,500
Havre de Grace	4,212
Hyattsville	1,917
Lauraville	1,000
Laurel	2,415
Lime Kiln	1,000
Lonaconing	1,553
Midland	1,173
Mount Rainier	1,242
Mt. Savage	3,600
Mt. Washington	1,600
Mt. Winans	1,500
Oakland	1,366
Ocean	1,300
Orangeville	1,500
Oxford	1,191
Pikesville	1,200
Pocomoke City	2,369
Port Deposit	1,394
Princess Anne	1,006
Reisterstown	1,000
Relay	2,000
Rockville	1,181
St. Michaels	1,517
Salisbury	6,690
Savage	1,000
Snow Hill	1,844
So. Baltimore	2,600
Sparrows Point	4,000
Takoma	1,159
Texas	1,000
Towson	3,700
Waverly	2,000
Western Port	2,702
Westminster	3,295
Westport	1,000
Williamsport	1,571
Woodberry	13,000

MASSACHUSETTS

Abington	2,800
Adams	11,900
Agawam	1,500
Amesbury	8,000
Amherst	3,200
Andover	6,100
Arlington	8,900
Arlington Hgts	2,200
Ashland	1,510
Assonet	1,200
Athol	6,000
Attleboro	12,400
Auburndale	1,500
Avon	1,000
Ayer	2,610
Baldwinsville	1,500
Barre	1,700
Belchertown	1,410
Belmont	3,910
Beverly	18,650
Beverly Farms	1,000
Billerica	2,000
Blackstone	3,400
Bondsville	1,750
BOSTON	670,585
Braintree	2,600
Bridgewater	3,000
Brockton	56,878
Brookfield	1,500
Brookline	27,792
Cambridge	104,839
Canton	3,700
Chatham	1,000
Chelmsford	1,900
Chelsea	32,452
Cherry Valley	1,200
Chester	1,000

MASS. Cont'd.	
Chicopee	25,401
Chicopee Falls	8,500
Cliftondale	3,500
Clinton	13,000
Cochituate	1,300
Cohasset	1,000
Colerain	1,200
Collinsville	1,200
Concord	3,450
Concord Jc	1,850
Dalton	3,000
Danvers	7,950
Danversport	1,000
Dartmouth	1,600
Dedham	3,900
Deerfield	1,100
Dracut	2,100
Dudley	2,550
East Braintree	1,200
East Bridgewater	2,900
East Dedham	3,800
East Douglass	1,500
Easthampton	8,110
East Milton	1,700
East Pepperell	2,400
East Taunton	1,000
East Weymouth	4,000
Edgartown	1,000
Everett	33,484
Fairhaven	4,980
Fall River	119,295
Falmouth	1,525
Feeding Hills	1,300
Fiskdale	1,200
Fitchburg	37,826
Florence	3,000
Foxboro	3,000
Framingham	2,000
Franklin	4,500
Gardner	13,910
Georgetown	1,500
Gilbertville	2,250
Globe Village	2,300
Gloucester	24,398
Grafton	1,250
Graniteville	1,200
Great Barrington	3,500
Greenfield	9,910
Groton	1,750
Groveland	1,900
Hadley	1,650
Hamilton	1,310
Hatfield	1,300
Haverhill	44,115
Haydenville	1,100
Hingham	3,400
Hinsdale	1,000
Holbrook	2,200
Holliston	2,000
Holyoke	57,730
Hopedale	1,500
Hopkinton	2,000
Housatonic	2,200
Hudson	5,200
Huntington	1,300
Hyannis	1,500
Hyde Park	14,507
Indian Orchard	6,200
Ipswich	5,000
Kingston	1,950
Lakeville	1,000
Lancaster	1,400
Lanesville	1,000
Lawrence	85,892
Lee	3,000
Leeds	1,100
Leicester	1,500
Lenox	2,200
Leominster	14,910

MASS. Cont'd.	
Lexington	3,600
Linwood	1,400
Lowell	106,294
Ludlow	3,350
Lynn	89,336
Malden	44,404
Manchaug	1,600
Manchester	2,500
Mansfield	4,310
Marblehead	7,010
Marlboro	14,579
Maynard	5,910
Medfield	3,010
Medford	23,150
Medway	1 400
Melrose	15,715
Melrose Highlands	4,200
Merrick	1,300
Merrimac	1,910
Methuen	9,110
Middleboro	5 700
Milford	12,910
Millbury	4,000
Millville	2,000
Milton	7,210
Mittineague	3,000
Monson	3,500
Nantasket	1,400
Nantucket	2,700
Natick	8,900
Needham	2,700
Needham Hgts	1,500
New Bedford	96,652
Newburyport	14,949
Newton	39,806
Newton Center	6,000
Newton Highlands	4,000
Newton Lower Falls	2,300
Newton Upper Falls	3,600
Newtonville	5,700
North Abington	2,300
North Adams	22,019
North Amherst	1,500
Northampton	19,431
North Andover	5,210
North Attleboro	7,910
Northboro	1,700
Northbridge	1,500
North Brookfield	1,800
North Chelmsford	1,700
North Dartmouth	1,500
North Dighton	1,000
North Easton	3,200
North Grafton	2,400
North Leominster	1,910
North Plymouth	1,000
North Scituate	1,000
Norwood	7,910
Oak Bluffs	1,000
Onset	1,600
Orange	4,000
Oxford	1,750
Palmer	5,950
Peabody	14,910
Pittsfield	32,121
Plainville	1,200
Plymouth	11,200
Provincetown	4,000
Quincy	32,642
Randolph	4,000
Raynham	1,100
Reading	4,910
Readville	1,000

MASS. Cont'd.	
Rehoboth	1,310
Revere	18,219
Rockland	4,000
Rockport	3,250
Rowley	1,000
Rutland	1,200
Salem	43,697
Sandwich	1,000
Saugus	1,500
Saxonville	1,500
Scituate	1,150
Sheffield	1,200
Shelburne Falls	1,300
Shirley	1,200
Somerville	77,236
South Ashburnham	1,000
South Braintree	3,000
Southbridge	10,210
South Framingham	9,100
South Hadley	1,400
South Hadley Falls	3,400
South Weymouth	4,000
Spencer	6,500
Springfield	88,926
Stockbridge	1,700
Stoneham	6,910
Stoughton	4,000
Swampscott	5,910
Taunton	34,259
Thorndike	1,200
Turners Falls	5,200
Uxbridge	3,000
Wakefield	11,310
Walpole	2,500
Waltham	27,834
Ware	8,000
Wareham	1,200
Warren	3,000
Watertown	12,800
Waverley	1,500
Webster	10,210
Wellesley	2,700
Wellesley Hills	2,000
Westboro	4,500
West Bridgewater	1,000
Westfield	15,000
West Medford	4,000
West Medway	1,250
Westminster	1,000
West Newton	7,200
Weston	1,200
Westport	1,600
West Springfield	3,800
West Upton	1,000
West Warren	1,100
Weymouth	3,500
Whitinsville	4,500
Whitman	6,000
Wilbraham	1,000
Williamstown	3,000
Willimansett	1,400
Wilmington	1,200
Winchendon	4,100
Winchester	6,000
Winthrop	10,132
Woburn	15,308
Worcester	145,986
Wrentham	1,000

MICHIGAN

Adrian	10,763
Albion	5,833
Algonac	1,204
Allegan	3,419
Allouez	1,150
Alma	2,757
Alpena	12,706
Ann Arbor	14,817
Bad Axe	1,559
Baltic	2,500
Bangor	1,158
Baraga	1,071
Battle Creek	25,267
Bay City	45,166
Beacon	1,000
Belding	4,119
Bellaire	1,050
Benton Harbor	9,185
Bessemer	4,583
Big Rapids	4,519
Birmingham	1,607
Blissfield	1,474
Boyne City	5,218
Bronson	1,020
Buchanan	1,831
Cadillac	8,375
Calumet	30,000
Caro	2,272
Carrollton	2,200
Cass City	1,126
Cassopolis	1,358
Champion	1,500
Charlevoix	2,420
Charlotte	4,886
Cheboygan	6,859
Chelsea	1,764
Chesaning	1,363
Clare	1,350
Clinton	1,011
Coldwater	5,945
Constantine	1,244
Corunna	1,384
Croswell	1,380
Crystal Falls	3,775
Decatur	1,286
Delray	7,500
Detroit	465,766
Dollar Bay	2,000
Dowagiac	5,088
Dundee	1,070
Durand	2,315
East Jordan	2,516
East Lake	3,200
East Tawas	1,452
Eaton Rapids	2,094
Ecorse	1,063
Elk Rapids	1,673
Escanaba	13,194
Essexville	1,477
Evart	1,386
Fenton	2,331
Flint	38,550
Ford City	1,689
Frankfort	1,555
Fremont	2,009
Gaylord	1,538
Gladstone	4,211
Glenwood	1,200
Grand Haven	5,856
Grand Ledge	2,893
Grand Marais	2,500
Grand Rapids	112,571
Grayling	1,775
Greenville	4,045
Gwinn	1,000
Hamtramck	3,559
Hancock	8,981
Harbor Beach	1,556
Harbor Springs	1,805
Hart	1,555
Hartford	1,268
Hastings	4,383
Hermansville	1,200
Highland Park	4,120
Hillsdale	5,001
Holland	10,490
Holly	1,537
Homer	1,008
Houghton	5,113
Howard City	1,046
Howell	2,338
Hubbell	1,059
Hudson	2,178
Imlay City	1,174
Ionia	5,030
Iron Mountain	9,216
Iron River	2,450
Ironwood	12,821
Ishpeming	12,448
Ithaca	1,876
Jackson	31,433
Jennings	1,200
Jonesville	1,396
Kalamazoo	39,437
Kalkaska	1,415
Lake Linden	2,325
Lake Odessa	1,222
LANSING	31,229
Lapeer	3,946
Laurium	8,537
Lawton	1,042
Leslie	1,032
Lowell	1,761
Ludington	9,132
Mancelona	1,200
Manchester	1,047
Manistee	12,381
Manistique	4,722
Manton	1,069
Marcellus	1,047
Marine City	3,770
Marlette	1,062
Marquette	11,503
Marshall	4,236
Mason	1,742
Monroe	6,893
Morenci	1,515
Mount Clemens	7,707
Mount Pleasant	3,972
Munising	2,952
Muskegon	24,062
Muskegon Hgts	1,690
Nadeau	1,000
Nashville	1,346
Negaunee	8,460
Newaygo	1,207
Newberry	1,182
Niles	5,156
Northville	1,665
Norway	4,974
Onaway	2,702
Ontonagon	1,964
Osceola	1,400
Otsego	2,812
Ovid	1,078
Owosso	9,639
Oxford	1,191
Painesdale	1,250
Paw Paw	1,643
Pellston	1,089
Pentwater	1,129
Petoskey	4,778
Plainwell	1,493
Plymouth	1,671
Pontiac	14,532
Port Huron	18,863
Portland	1,832
Quincy	1,347
Quinnesec	1,000
Reading	1,102
Red Jacket	4,211
Reed City	1,690
Republic	2,400
Richmond	1,277
Riverrouge	4,163
Rochester	1,516
Rockland	1,000
Romeo	1,787
Royal Oak	1,071
Saginaw	50,510
St. Charles	1,451
St. Clair	2,633
St. Clair Heights	1,252
St. Ignace	2,118
St. Johns	3,154
St. Joseph	5,936
St. Louis	1,940
Sault Ste. Marie	12,615
Scottville	891
Sebewaing	1,347
Shelby	1,260
South Haven	3,577
South Range	1,097
Sparta	1,203
Springwells	1,500
Stambaugh	1,322
Stanton	1,012
Sturgis	3,635
Tawas City	1,061
Tecumseh	2,332
Three Oaks	1,175
Three Rivers	5,072
Traverse City	12,115
Trenton	1,224
Union City	1,340
Vassar	1,659
Vicksburg	1,624
Vulcan	1,500
Wayne	1,263
West Branch	1,276
Whitehall	1,437
Williamston	1,042
Woodmere	5,100
Wyandotte	8,287
Yale	1,223
Ypsilanti	6,230
Zeeland	1,982

MINNESOTA

Ada	1,432
Adrian	1,112
Aitkin	1,638
Akely	2,000
Albert Lea	6,192
Alexandria	3,001
Anoka	3,972
Appleton	1,221
Aurora	1,919
Austin	6,960
Barnesville	1,353
Belleplaine	1,204
Bemidji	5,099
Benson	1,677
Biwabik	1,690
Blue Earth	2,319
Bovey	1,377
Brainerd	8,526
Breckenridge	1,840
Brown Valley	1,058
Buffalo	1,227
Buhl	1,005
Caledonia	1,372
Canby	1,528
Cannon Falls	1,385
Cass Lake	2,011
Chaska	2,050
Chatfield	1,228
Chisholm	7,684
Cloquet	7,031
Coleraine	1,613
Crookston	7,559
Dawson	1,318
Delano	1,031
Detroit	2,807
Duluth	78,466
East Grand Forks	2,533
Edina Mills	1,191
Ely	3,572
Eveleth	7,036
Excelsior	1,015
Fairmont	2,958
Faribault	9,001
Farmington	1,024
Fergus Falls	6,887
Fosston	1,075
Frazee	1,645
Gilbert	1,700
Glencoe	1,788
Glenwood	2,161
Grand Rapids	2,230
Granite Falls	1,454
Hastings	3,983
Hibbing	8,832
Hopkins	3,200
Hutchinson	2,368
Internat'l Falls	1,487
Jackson	1,907
Janesville	1,173
Jordan	1,151
Kenyon	1,237
Lake City	3,142
Lake Crystal	1,055
Lesueur	1,755
Litchfield	2,333
Little Falls	6,078
Long Prairie	1,250
Luverne	2,540
Madelia	1,273
Madison	1,811
Mankato	10,365
Marshall	2,152
Melrose	2,591
Milaca	1,102
Minneapolis	301,408
Montevideo	3,056
Montgomery	1,267
Moorhead	4,840
Morris	1,685
Mountain Lake	1,081
Mount Iron	1,343
Nashwauk	2,080
New Prague	1,554
New Ulm	5,648
Northfield	3,265
North Mankato	1,279
North St. Paul	1,404
Ortonville	1,774
Osakis	1,013
Owatonna	5,658
Park Rapids	1,801
Pelican Rapids	1,019
Perham	1,376
Pine City	1,258
Pipestone	2,475
Plainview	1,175
Preston	1,193
Princeton	1,555
Proctor	2,243
Red Lake Falls	1,757
Red Wing	9,048
Redwood Falls	1,666
Renville	1,182
Richfield	2,673
Rochester	7,844
Rushford	1,011
St. Charles	1,159
St. Cloud	10,600
St. James	2,102
St. Louis Park	1,743
ST. PAUL	214,744
St. Peter	4,176

MINNESOTA Cont'd.	
Sandstone	1,818
Sauk Center	2,154
Sauk Rapids	1,745
Shakopee	2,302
Sleepy Eye	2,247
South St. Paul	4,510
South Stillwater	1,343
Sparta	1,050
Springfield	1,482
Spring Valley	1,817
Staples	2,558
Stillwater	10,198
Thief River Falls	3,714
Tower	1,111
Tracy	1,876
Two Harbors	4,990
Virginia	10,473
Wabasha	2,622
Wadena	1,820
Warren	1,613
Waseca	3,054
Waterville	1,273
Wells	1,755
West Minneapolis	3,022
West St. Paul	2,660
Wheaton	1,300
White Bear Lake	1,505
Willmar	4,135
Windom	1,749
Winnebago	1,554
Winona	18,583
Winthrop	1,043
Worthington	2,385
Zumbrota	1,138

MISSISSIPPI Cont'd.	
Magnolia	1,823
Meridian	23,285
Moss Point	3,054
Mount Olive	1,077
Natchez	11,791
New Albany	2,032
Newton	1,878
Ocean Springs	1,472
Okolona	2,584
Oxford	2,014
Pascagoula	3,379
Pass Christian	2,458
Philadelphia	1,209
Pontotoc	1,277
Poplarville	1,272
Port Gibson	2,252
Richton	1,250
Rolling Fork	1,000
Rosedale	1,103
Sardis	1,406
Senatobia	1,275
Shubuta	1,168
Starkville	2,698
Stonewall	1,000
Summit	1,471
Sumrall	2,046
Tupelo	3,881
Vicksburg	20,814
Water Valley	4,275
Wesson	2,024
West Point	4,864
Winona	2,512
Woodville	1,233
Yazoo City	6,796

MISSISSIPPI

Aberdeen	3,708
Ackerman	1,398
Amory	2,122
Bay St. Louis	3,388
Belzona	1,059
Biloxi	8,049
Booneville	1,337
Brookhaven	5,293
Canton	3,929
Charleston	1,834
Clarksdale	4,079
Cleveland	1,001
Collins	2,581
Columbia	2,029
Columbus	8,988
Corinth	5,020
Crystal Springs	1,343
Durant	1,881
Ellisville	2,446
Forest	1,136
Gloster	1,486
Graysport	1,409
Greenville	9,610
Greenwood	5,836
Grenada	2,814
Gulfport	6,386
Hattiesburg	11,733
Hazlehurst	2,056
Holly Springs	2,192
Houston	1,400
Indianola	1,098
Ittabena	1,427
Iuka	1,221
JACKSON	21,262
Kosciusko	2,385
Laurel	8,465
Leland	1,547
Lexington	2,428
Long Beach	1,026
Louisville	1,181
Lumberton	2,122
McComb	6,237
Macon	2,024

MISSOURI

Alba	1,500
Albany	1,922
Appleton City	1,018
Ashgrove	1,075
Aurora	4,148
Bethany	1,931
Bevier	1,900
Bloomfield	1,147
Bolivar	1,975
Bonneterre	5,700
Boonville	4,252
Bowling Green	1,585
Braymer	1,027
Breckenridge	1,025
Brookfield	5,749
Brunswick	1,606
Butler	2,894
California	2,154
Cameron	2,980
Campbell	1,781
Canton	2,218
Cape Girardeau	8,475
Carl Junction	1,115
Carrollton	3,452
Carterville	4,539
Carthage	9,483
Caruthersville	3,655
Centralia	2,116
Chaffee	2,082
Charleston	3,144
Chillicothe	6,265
Chitwood	1,600
Clarence	1,322
Clayton	1,500
Clinton	4,992
Columbia	9,662
Crane	1,002
Crystal City	1,800
Deepwater	1,398
Desloge	4,000
Desoto	4,721
Dexter	2,322
Doerun Junction	1,200

MISSOURI Cont'd.	
Doniphan	1,222
Duenweg	2,500
East Prairie	1,500
Edina	1,562
Edna	1,209
Eldon	1,999
Eldorado Springs	2,503
Elsberry	1,018
Elvins	2,071
Excelsior Springs	3,900
Farmington	2,613
Fayette	2,586
Ferguson	1,658
Festus	2,556
Fisk	1,000
Flat River	5,112
Fornfelt	1,200
Fredericktown	2,632
Fulton	5,228
Gallatin	1,825
Glasgow	1,507
Granby	2,442
Grandin	1,000
Graniteville	1,000
Grant City	1,207
Greenfield	1,434
Hamilton	1,761
Hannibal	18,341
Harrisonville	1,947
Hayti	1,057
Hermann	1,592
Hibbard	1,243
Higbee	1,215
Higginsville	2,628
Holden	2,007
Huntsville	2,247
Independence	9,859
Jackson	2,105
JEFFERSON CITY	11,850
Joplin	32,073
Kahoka	1,758
Kansas City	248,381
Kennett	3,033
Kirksville	6,347
Kirkwood	4,171
Labelle	1,017
Lagrange	1,360
Lamar	2,316
Laplata	1,605
Lathrop	1,038
Lebanon	2,430
Lees Summit	1,455
Lexington	5,242
Liberty	2,980
Louisiana	4,454
Macon	3,584
Malden	2,116
Maplewood	4,976
Marceline	3,920
Marionville	1,272
Marshall	4,869
Marshfield	1,193
Maryville	4,762
Maysville	1,051
Memphis	1,984
Mexico	5,939
Milan	2,191
Moberly	10,923
Monett	4,177
Monroe City	1,949
Montgomery City	1,789
Morehouse	1,636
Mound City	1,575
Mountaingrove	1,722
Mount Vernon	1,161
Neosho	3,661
Nevada	7,176
New Madrid	1,882
Norborne	1,241

MISSOURI Cont'd.	
Novinger	1,711
Odessa	1,531
Old Orchard	2,500
Oran	1,023
Oregon	1,002
Oronogo	1,912
Osceola	1,114
Pacific	1,418
Palmyra	2,168
Paris	1,474
Pattonsburg	1,044
Perryville	1,708
Piedmont	1,154
Pierce City	2,043
Plattsburg	1,650
Pleasanthill	2,065
Poplarbluff	6,916
Princeton	1,385
Prosperity	1,200
Richhill	2,755
Richmond	3,664
Rockport	1,053
Rolla	2,261
St. Charles	9,437
Ste. Genevieve	1,967
St. Francois	1,400
St. James	1,100
St. Joseph	77,403
St. Louis	687,029
Salem	1,796
Salisbury	1,834
Sarcoxie	1,311
Savannah	1,583
Sedalia	17,822
Senath	1,029
Shelbina	2,174
Sikeston	3,327
Slater	3,238
Springfield	35,201
Stanberry	2,121
Sweet Springs	1,122
Tarkio	1,966
Thayer	1,613
Tipton	1,273
Trenton	5,656
Troy	1,120
Unionville	2,000
University	2,417
Valley Park	1,800
Vandalia	1,595
Versailles	1,598
Warrensburg	4,689
Washington	3,670
Webb City	11,817
Webster Groves	7,080
Wellston	7,312
Wellsville	1,194
Weston	1,019
Westplains	2,914
Willowprings	1,401
Windsor	2,241
Zincite	1,000

MONTANA

Anaconda	10,134
Belt	1,158
Bigtimber	1,022
Billings	10,031
Boulder	1,300
Bozeman	5,107
Butte	39,165
Centerville	2,500
Deer Lodge	2,570
Dillon	1,835
East Helena	1,200
Forsyth	1,398
Fort Benton	1,004
Glasgow	1,158
Glendive	2,428

MONTANA Cont'd.	
Great Falls	13,948
Hamilton	4,240
Havre	3,624
HELENA	12,515
Kalispell	5,549
Kendall	1,200
Lamedeer	1,550
Lewistown	2,992
Livingston	5,359
Marysville	2,000
Meaderville	1,850
Miles City	4,697
Missoula	12,869
Philipsburg	1,109
Red Lodge	4,860
Roundup	1,513
Sandcoulee	2,000
Stockett	1,400
Walkerville	2,491
Whitefish	1,479

NEBRASKA

Ainsworth	1,045
Albion	1,584
Alliance	3,105
Alma	1,066
Ashland	1,379
Auburn	2,729
Aurora	2,630
Beatrice	9,356
Benson	3,170
Blair	2,584
Bloomfield	1,264
Brokenbow	2,260
Cambridge	1,029
Central City	2,428
Chadron	2,687
Clay Center	1,065
Collegeview	1,508
Columbus	5,014
Cozad	1,096
Crawford	1,323
Creighton	1,373
Crete	2,404
David City	2,177
Dundee	1,023
Edgar	1,080
Fairbury	5,294
Fairfield	1,054
Falls City	3,255
Florence	1,526
Fremont	8,718
Friend	1,261
Fullerton	1,638
Geneva	1,741
Genoa	1,376
Gothenburg	1,730
Grand Island	10,326
Hartington	1,413
Harvard	1,102
Hastings	9,338
Havelock	2,680
Hebron	1,778
Holdrege	3,030
Humboldt	1,176
Kearney	6,202
Lexington	2,059
LINCOLN	43,973
Loup City	1,128
McCook	3,765
Madison	1,708
Minden	1,559
Nebraska City	5,488
Neligh	1,566
Norfolk	6,025
North Bend	1,105
North Platte	4,793
Oakland	1,073
Omaha	124,096
O'Neill	2,089

NEBRASKA Cont'd.		NEW HAMP. Cont'd.		NEW JERSEY Cont'd.		NEW JERSEY Cont'd.		NEW MEXICO	
Ord	1,960	Gorham	1,000	Dunellen	1,990	Newton	4,467	Alamogordo	3,600
Osceola	1,105	Greenville	1,000	East Newark	3,163	North Paterson	1,300	Albuquerque	11,020
Pawnee City	1,610	Groveton	1,900	East Orange	34,371	North Plainfield	6,117	Artesia	1,883
Pierce	1,200	Hanover	1,500	East Rutherford	4,275	Nutley	6,009	Carlsbad	1,736
Plattsmouth	4,287	Henniker	1,225	Eatontown	1,200	Ocean City	1,950	Clovis	3,255
Ponca	1,000	Hinsdale	1,200	Edgewater	2,655	Ocean Grove	3,100	Deming	1,864
Randolph	1,137	Keene	10,068	Egg Harbor City	2,181	Old Bridge	1,000	East Las Vegas	3,755
Ravenna	1,359	Laconia	10,183	Elizabeth	73,409	Orange	29,630	Gallup	2,204
Red Cloud	1,686	Lancaster	2,900	Elmer	1,167	Oxford	2,600	Hillsboro	1,000
St. Paul	1,336	Lebanon	4,500	Englewood	9,924	Palisades Park	1,411	Isleta	1,000
Schuyler	2,152	Lisbon	1,800	Fairhaven	1,100	Palmyra	2,500	Laguna	1,000
Scottsbluff	1,746	Littleton	3,059	Fairview	2,441	Park Ridge	1,401	Lascruces	3,836
Seward	2,106	Londonderry	1,000	Flemington	2,693	Passaic	54,773	Las Vegas	3,179
Shelton	1,005	Manchester	70,063	Florence	1,800	Paterson	125,600	Lincoln	1,100
Sidney	1,185	Marlboro	1,000	Fort Lee	4,472	Paulsboro	2,121	Lordsburg	1,000
Sioux	1,196	Meredith	1,410	Franklin Furnace	1,800	Penn Grove	2,118	Melrose	1,000
South Omaha	26,259	Milford	3,200	Freehold	3,233	Perth Amboy	32,121	Mesilla	1,300
Stanton	1,342	Nashua	26,005	Garfield	10,213	Phillipsburg	13,903	Mora	1,400
Stromsburg	1,355	Newmarket	3,200	Garwood	1,118	Pitman	1,950	Pinos Altos	1,100
Superior	2,106	Newport	3,200	Glassboro	2,100	Plainfield	20,550	Portales	1,292
Sutton	1,702	North Conway	2,000	Glen Ridge	3,260	Pleasantville	4,390	Puerto de Luna	1,100
Tecumseh	1,748	North Walpole	1,700	Glen Rock	1,055	Point Pleasant B'ch	1,003	Ranches of Taos	1,400
Tekamah	1,524	Peterboro	1,650	Gloucester City	9,462	Pompton Lakes	1,060	Raton	4,539
University Place	3,200	Pittsfield	2,000	Grantwood	1,600	Port Norris	1,350	Roswell	6,172
Valentine	1,098	Plymouth	1,500	Greenwich	1,000	Princeton	5,136	San Marcial	1,000
Wahoo	2,168	Portsmouth	11,269	Guttenberg	5,647	Prospect Park	2,719	SANTA FE	5,072
Wayne	2,140	Rochester	8,868	Hackensack	14,050	Rahway	9,337	Santa Rita	1,900
Weeping Water	1,067	Rollinsford	1,000	Hackettstown	2,715	Ramsey	1,667	Santa Rosa	1,000
Westpoint	1,776	Seabrook	1,000	Haddonfield	4,142	Raritan	3,672	Silver City	3,217
Wilber	1,219	Somersworth	6,704	Haddon Heights	1,452	Red Bank	7,398	Socorro	1,560
Wisner	1,081	Suncook	2,700	Haledon	2,560	Ridgefield Park	3,000	Taos	1,400
Wymore	2,613	Tilton	1,340	Hammonton	5,088	Ridgewood	5,416	Tome	1,000
York	6,235	Troy	1,000	Harrison	14,498	Riverside	3,800	Tucumcari	2,526
NEVADA		West Concord	1,200	Hasbrouck Hgts.	2,155	Riverton	1,788	Zuni	1,300
		W. Stewartstown	1,000	Hawthorne	3,400	Rockaway	1,902	NEW YORK	
Austin	1,300	Whitefield	1,575	Hibernia	1,400	Roosevelt	5,786		
CARSON CITY	2,466	Wilton	1,300	High Bridge	1,545	Roselle	2,725	Adams	1,458
Columbia	1,000	Winchester	1,900	Highland Park	1,517	Roselle Park	3,138	Addison	2,004
East Ely	1,500	Wolfeboro	1,700	Highlands	1,386	Rumson	1,449	Akron	1,677
Elko	1,677	Woodsville	2,100	Hightstown	1,879	Rutherford	7,045	ALBANY	100,253
Ely	2,055	NEW JERSEY		Hoboken	70,324	Salem	6,614	Albion	5,016
Eureka	1,800			Holly Beach	1,901	Sayreville	5,000	Alexandria Bay	1,899
Goldfield	4,838	Arlington	6,000	Hopewell	1,073	Scotch Plains	1,000	Allegany	1,286
Gold Hill	2,100	Asbury Park	10,150	Hudson Hgts.	1,500	Seabright	1,220	Amenia	1,200
Hawthorne	1,000	Atlantic City	46,150	Irvington	11,877	Secaucus	4,740	Amityville	2,517
Horn Silver	1,000	Atlantic H'hl'ds.	1,645	Jamesburg	2,075	Somerville	5,060	Amsterdam	31,267
Las Vegas	1,500	Audubon	1,343	Jersey City	267,779	South Amboy	7,007	Andover	1,136
Lovelocks	1,000	Bayonne	55,545	Juliustown	1,000	South Boundbrook	1,024	Angelica	1,056
McGill	2,200	Belleville	8,500	Kearny	18,659	South Orange	6,014	Arcade	1,294
Pioche	1,000	Belmar	1,433	Keyport	3,554	South River	4,772	Athens	1,956
Pioneer	1,200	Belvidere	1,764	Lakehurst	1,000	Stanhope	1,031	Attica	1,869
Rawhide	5,100	Bergenfield	1,991	Lakewood	4,000	Summit	7,500	Auburn	34,668
Reno	10,867	Bernardsville	1,000	Lambertville	4,657	Sussex	1,212	Ausable Forks	2,609
Sparks	2,500	Beverly	2,140	Leonia	1,486	Swedesboro	1,477	Avoca	1,057
Tonopah	3,900	Bloomfield	15,070	Little Falls	3,600	Tenafly	2,756	Avon	2,053
Virginia City	2,244	Bogota	1,125	Little Ferry	2,541	Toms River	2,200	Babylon	2,600
Winnemucca	1,786	Boonton	4,930	Lodi	4,138	Totowa	1,130	Bainbridge	1,159
NEW HAMPSHIRE		Bordentown	4,250	Long Branch	13,298	TRENTON	96,815	Baldwin	3,000
		Boundbrook	3,970	Lyndhurst	1,350	Tuckerton	1,268	Baldwinsville	3,099
Ashland	1,390	Bradley Beach	1,807	Madison	4,658	Union	21,023	Ballston Spa	4,138
Berlin	11,780	Bridgeton	14,209	Manasquan	1,582	Union	1,900	Batavia	11,613
Berlin Mills	1,200	Burlington	8,336	Matawan	1,646	Upper Montclair	1,100	Bath	3,884
Bethlehem	1,100	Butler	2,265	Maurice River	1,100	Verona	1,675	Bay Shore	3,400
Bristol	1,200	Caldwell	2,236	Mays Landing	1,800	Vineland	5,282	Belmont	1,094
Canaan	1,000	Camden	94,538	Medford	1,200	Wallington	3,448	Binghamton	48,443
Charlestown	1,000	Cape May	2,471	Mendham	1,129	Washington	3,567	Bolivar	1,318
Claremont	6,800	Carlstadt	3,807	Merchantville	1,996	Weehawken	11,228	Boonville	1,794
Colebrook	1,200	Carteret	3,500	Metuchen	2,138	Westfield	6,420	Brewster	1,296
CONCORD	21,497	Cedarville	1,500	Midland Park	2,001	West Hoboken	35,403	Bridgehampton	1,500
Conway	1,100	Chatham	1,874	Millburn	3,000	West New York	13,560	Brighton	1,000
Derry	2,500	Chester	1,100	Milltown	1,584	West Orange	10,980	Brockport	3,579
Dover	13,247	Clayton	1,926	Millville	12,451	Westwood	1,870	Brockton	1,181
Dover Point	1,000	Cliffside	3,394	Montclair	21,550	Weymouth	1,000	Bronxville	1,863
East Jaffrey	1,700	Clifton	8,100	Moorestown	4,000	Wharton	2,983	Buffalo	423,715
East Rochester	1,200	Closter	1,483	Morristown	12,507	Williamstown	1,600	Caledonia	1,290
Epping	1,100	Collingswood	4,795	Mt. Holly	4,800	Woodbine	2,399	Cambridge	1,528
Exeter	4,800	Cranford	1,000	Netcong	1,532	Woodbury	4,642	Camden	2,170
Farmington	2,000	Delford	1,005	Newark	347,469	Woodridge	1,043	Canajoharie	2,273
Franklin	6,132	Dover	7,468	New Brunswick	23,388	Woodstown	1,613	Canandaigua	7,217
Goffstown	2,100	Dumont	1,783	New Durham	4,100	Woodbridge	4,500	Canastota	3,247

NEW YORK Cont'd.		NEW YORK Cont'd.		NEW YORK Cont'd.		NEW YORK Cont'd.		NEW YORK Cont'd.	
Canisteo	2,259	Good Ground	1,000	Mineola	1,981	Roosevelt	1,000	Williamsville	1,105
Canton	2,701	Goshen	3,081	Mineville	2,000	Roscoe	1,000	Wolcott	1,216
Cape Vincent	1,155	Gouverneur	4,128	Mohawk	2,079	Rosendale	1,125	Worcester	1,500
Carthage	3,563	Gowanda	2,012	Monroe	1,195	Roseton	2,000	Yonkers	79,803
Castile	1,040	Granville	3,920	Monticello	1,941	Roslyn	1,800	Yorktown Hgts	1,250
Castleton	1,396	Great Neck	2,000	Montour Falls	1,208	Rouses Point	1,638		
Catskill	5,296	Greene	1,275	Moravia	1,324	Rye	3,964	NORTH CAROLINA	
Cattaraugus	1,165	Green Island	4,737	Moriah	1,000	Sag Harbor	3,408	Albemarle	2,116
Cazenovia	1,861	Greenport	3,089	Mount Kisco	2,802	St. Johnsville	2,536	Ashboro	1,865
Center Moriches	1,600	Greenwich	2,314	Mount Morris	2,782	St. Regis Falls	1,500	Asheville	18,762
Champlain	1,280	Groton	1,260	Mount Vernon	30,919	Salamanca	5,792	Beaufort	2,483
Charlotte	1,938	Hamburg	2,134	Naples	1,093	Salem	1,250	Belhaven	2,863
Chateaugay	1,045	Hamilton	1,689	Newark	6,227	Saranac Lake	4,983	Belmont	1,176
Chatham	2,251	Hammondsport	1,254	Newark Valley	1,466	Saratoga Springs	12,693	Bessemer City	1,529
Chester	1,210	Hancock	1,329	New Berlin	1,114	Saugerties	3,929	Burlington	4,808
Clayton	1,941	Harrison	1,500	Newburgh	27,805	Sayville	3,200	Canton	1,393
Clifton Sprs	1,600	Hastings upon Hudson	4,552	New Hartford	1,195	Scarsdale	1,000	Caroleen	1,892
Clinton	1,236	Haverstraw	5,669	New Hyde Park	1,000	Schenectady	72,826	Chadbourn	1,242
Clintondale	1,000	Hempstead	4,964	New Paltz	1,230	Schuylerville	1,614	Chapelhill	1,149
Clyde	2,695	Herkimer	7,520	New Rochelle	28,867	Scotia	2,957	Charlotte	34,014
Cobleskill	2,088	Highland	4,000	New York	4,776,883	Sea Cliff	1,694	Cherryville	1,153
Coeymans	1,000	Highland Falls	2,000	New York Mills	2,600	Seneca Falls	6,588	Clayton	1,441
Cohoes	24,709	Hillburn	2,470	Niagara Falls	30,445	Shortsville	1,112	Cliffside	1,000
Cold Spring	2,549	Hoosick Falls	5,532	Norfolk	1,600	Sidney	2,507	Clinton	1,101
Cooperstown	2,484	Hornell	13,617	Northport	2,096	Silvercreek	2,512	Concord	8,715
Corinth	2,166	Horseheads	1,778	Northville	1,130	Skaneateles	1,615	Cooleemee	2,000
Corning	13,730	Houghton	1,090	North Pelham	1,311	Sloan	1,259	Dallas	1,065
Cornwall	2,658	Huntington	5,000	North Tarrytown	5,421	Sloatsburg	1,150	Davidson	1,056
Cornwall-on-the-Hudson	1,400	Hudson	11,504	North Tonawanda	11,955	Sodus	1,800	Draper	1,000
Cortland	11,504	Hudson Falls	5,189	Norwich	7,422	Solvay	5,139	Dunn	1,823
Coxsackie	2,494	Ilion	6,588	Norwood	1,993	Southampton	2,509	Durham	18,241
Croton-on-Hudson	1,806	Inwood	2,000	Nunda	1,043	South Glens Falls	2,247	East Durham	1,500
Crown Point	1,900	Irvington	2,319	Nyack	4,619	South Nyack	2,068	East Spencer	1,729
Cuba	1,556	Islip	2,300	Oakfield	1,236	Southold	1,600	Edenton	2,789
Dannemora	1,146	Ithaca	14,802	Ogdensburg	15,933	Spencerport	1,000	Elizabeth City	8,412
Dansville	3,938	Jamestown	31,297	Olean	14,743	Spring Valley	2,353	Enfield	1,167
Delhi	1,736	Johnstown	10,447	Oneida	8,317	Springville	2,246	Fayetteville	7,045
Depew	3,921	Katonah	1,500	Oneonta	9,491	Stillwater	1,004	Forest City	1,592
Deposit	1,864	Keeseville	1,835	Oriskany	1,200	Suffern	2,663	Gastonia	5,759
Dexter	1,005	Kenmore	1,020	Ossining	11,480	Syracuse	137,249	Gibsonville	1,162
Dobbs Ferry	3,455	Kingston	25,908	Oswego	23,368	Tarrytown	5,600	Goldsboro	6,107
Dolgeville	2,685	Lackawanna	14,549	Oswego Falls	3,100	Ticonderoga	2,475	Graham	2,504
Dundee	1,228	Lake Placid	1,682	Owego	4,633	Tivoli	1,034	Greensboro	15,895
Dunkirk	17,221	Lancaster	4,364	Oxford	1,654	Tomkins Cove	1,200	Greenville	4,101
East Aurora	2,781	Larchmont	1,958	Oyster Bay	3,800	Tonawanda	8,290	Hamlet	2,173
East Hampton	2,100	Le Roy	1,299	Painted Post	1,224	Troy	76,813	Hawriver	1,200
East Islip	1,000	Le Roy	1,299	Palmyra	2,268	Trumansburg	1,188	Henderson	4,503
East Rochester	2,398	Le Roy	1,299	Patchogue	3,824	Tuckahoe	2,722	Hendersonville	2,818
East Rockaway	1,200	Le Roy	1,299	Pearl River	1,500	Tupper Lake	3,067	Henrietta	1,856
East Syracuse	3,274	Le Roy	1,299	Peekskill	15,245	Tuxedo	2,000	Hertford	1,841
Eaton	2,500	Le Roy	1,299	Penn Yan	4,597	Unadilla	1,009	Hickory	3,716
Ellenburg	3,400	Le Roy	1,299	Perry	4,388	Union	1,544	Highpoint	9,525
Ellenville	3,114	Le Roy	1,299	Phelps	1,354	Utica	74,419	Highshoals	1,000
Elmira	37,176	Le Roy	1,299	Philmont	1,813	Valatie	1,219	James City	1,500
Elmira Hgts	2,732	Le Roy	1,299	Phoenix	1,642	Valley Stream	2,800	Kernersville	1,128
Endicott	2,408	Le Roy	1,299	Piermont	1,380	Verplanck	1,000	Kings Mountain	2,218
Fairport	3,112	Le Roy	1,299	Pine Plains	1,600	Walden	4,004	Kinston	6,995
Falconer	2,141	Le Roy	1,299	Pittsford	1,205	Walton	3,103	Lagrange	1,007
Farmingdale	1,567	Le Roy	1,299	Plattsburg	11,138	Wappingers Falls	3,195	Laurinburg	2,322
Fayetteville	1,481	Le Roy	1,299	Pleasantville	2,207	Warrensburg	3,100	Leaksville	1,127
Fishkill Landing	3,902	Le Roy	1,299	Port Byron	1,085	Warsaw	3,206	Lenoir	3,364
Floral Park	1,225	Le Roy	1,299	Port Chester	12,809	Warwick	2,318	Lexington	4,163
Fonda	1,100	Le Roy	1,299	Port Ewen	1,600	Waterford	3,245	Lincolnton	2,413
Forks	3,300	Le Roy	1,299	Port Henry	2,266	Waterloo	3,931	Littleton	1,152
Fort Edward	3,762	Le Roy	1,299	Port Jefferson	2,800	Watertown	26,730	Louisburg	1,775
Fort Plain	2,762	Le Roy	1,299	Port Jervis	9,564	Waterville	1,410	Lumberton	2,230
Frankfort	3,303	Le Roy	1,299	Port Washington	3,200	Watervliet	15,074	Madison	1,033
Franklinville	1,568	Le Roy	1,299	Potsdam	4,036	Watkins	2,817	Marion	1,519
Fredonia	5,285	Le Roy	1,299	Poughkeepsie	27,936	Waverly	4,855	Maxton	1,321
Freeport	4,836	Le Roy	1,299	Pulaski	1,788	Wayland	1,392	Mocksville	1,063
Friendship	1,218	Le Roy	1,299	Randolph	1,298	Webster	1,032	Monroe	4,082
Fulton	10,480	Le Roy	1,299	Ravena	1,300	Weedsport	1,344	Mooresville	3,400
Garnerville	1,300	Le Roy	1,299	Rensselaer	10,711	Wellsville	4,382	Morehead City	2,039
Geneseo	2,067	Le Roy	1,299	Rhinebeck	1,548	West Carthage	1,393	Morganton	2,712
Geneva	12,446	Le Roy	1,299	Richfield Springs	1,503	Westfield	2,985	Mountairy	3,844
Glasco	1,600	Le Roy	1,299	Ripley	1,000	West Haverstraw	2,369	Mount Olive	1,071
Glen Cove	7,600	Le Roy	1,299	Riverhead	2,800	West Point	1,200	Newbern	9,961
Glens Falls	15,243	Le Roy	1,299	Rochester	218,149	Whitehall	4,917	Newton	2,316
Gloversville	20,642	Le Roy	1,299	Rockville Center	3,667	White Plains	15,949	North Charlotte	1,500
		Le Roy	1,299	Rome	20,497	Whitesboro	2,375	Northwilkesboro	1,902

N. CAROLINA Cont'd.	
Oxford	3,018
Plymouth	2,165
RALEIGH	19,218
Ramseur	1,022
Randleman	1,950
Red Springs	1,089
Reidsville	4,828
Roanoke Rapids	1,670
Rockingham	2,155
Rockymount	8,051
Roxboro	1,425
Rutherfordton	1,062
Salem	5,533
Salisbury	7,153
Sanford	2,282
Scotland Neck	1,726
Selma	1,331
Shelby	3,127
Smithfield	1,347
Southport	1,484
Spencer	1,915
Spray	6,000
Spring Hope	1,246
Statesville	4,599
Tarboro	4,129
Thomasville	3,877
Troy	1,055
Wadesboro	2,376
Wake Forest	1,443
Washington	6,211
Waynesville	2,008
Weldon	1,999
West Durham	2,000
Whiteville	1,368
Whitney	1,500
Williamston	1,574
Wilmington	25,748
Wilson	6,717
Winston Salem	22,700
NORTH DAKOTA	
Beach	1,003
BISMARCK	5,443
Bottineau	1,331
Cando	1,332
Carrington	1,217
Casselton	1,553
Cooperstown	1,019
Devils Lake	5,157
Dickinson	3,678
Ellendale	1,389
Enderlin	1,540
Fargo	14,331
Grafton	2,229
Grand Forks	12,478
Hankinson	1,503
Harvey	1,443
Hillsboro	1,237
Jamestown	4,358
Kenmare	1,437
Lakota	1,023
Langdon	1,214
Larimore	1,224
Lidgerwood	1,019
Lisbon	1,758
Mandan	3,873
Mayville	1,070
Minot	6,188
Oakes	1,499
Park River	1,008
Rugby	1,630
Valley City	4,606
Wahpeton	2,467
Williston	3,124
OHIO	
Ada	2,465
Addyston	1,543
Akron	69,067
Alliance	15,083
Amherst	2,106
Amsterdam	1,041
Antwerp	1,187
Arcanum	1,361
Archbold	1,082
Ashland	6,795
Ashtabula	18,266
Athens	5,463
Barberton	9,410
Barnesville	4,233
Batavia	1,034
Bedford	1,783
Bellaire	12,946
Bellefontaine	8,238
Bellevue	5,209
Bellville	1,056
Belpre	1,249
Berea	2,609
Bergholz	1,011
Bethel	1,201
Bethesda	1,300
Blanchester	1,813
Bluffton	1,953
Bowling Green	5,222
Bradford	1,844
Bridgeport	3,974
Brooklyn	1,700
Brookville	1,187
Bryan	3,641
Buchtel	1,180
Bucyrus	8,122
Byesville	3,156
Cadiz	1,971
Caldwell	1,430
Cambridge	11,327
Canal Dover	6,621
Canton	50,217
Cardington	1,349
Carey	2,225
Carrollton	1,730
Carthage	3,618
Cedarville	1,059
Celina	3,493
Chagrin Falls	1,931
Chardon	1,542
Cheviot	1,930
Chicago	2,950
Chicago Jc	2,950
Chillicothe	14,508
Cincinnati	363,591
Circleville	6,744
Cleveland	560,663
Cleveland Hgts	2,955
Cleves	1,423
Clyde	2,815
Coalgrove	1,759
Coalton	1,111
College Hill	1,979
Collinwood	4,850
Columbiana	1,582
COLUMBUS	181,511
Columbus Grove	1,802
Conneaut	8,319
Continental	1,074
Corning	1,564
Coshocton	9,603
Covington	1,848
Crestline	3,807
Crooksville	3,028
Cuyahoga Falls	4,020
Dayton	116,577
Defiance	7,327
Degraff	1,082
Delaware	9,076
Delphos	5,038
Delta	1,689
Dennison	4,008
Deshler	1,515
Dillonvale	1,519
Dresden	1,549
Dunkirk	1,109
East Cleveland	9,179
East Liverpool	20,387
East Palestine	3,537
East Youngstown	4,972
Eaton	3,187
Edgerton	1,072
Elmwood Place	3,423
Elyria	14,825
Euclid	1,953
Fairport Harbor	2,263
Findlay	14,858
Forest	1,285
Fort Recovery	1,193
Fostoria	9,597
Franklin	2,659
Fredericktown	1,021
Fremont	9,939
Galion	7,214
Gallipolis	5,560
Garrettsville	1,001
Geneva	2,496
Georgetown	1,580
Germantown	1,778
Gibsonburg	1,864
Girard	3,736
Glendale	1,741
Glouster	2,527
Granville	1,394
Greenfield	4,228
Greenville	6,237
Hamden	1,019
Hamilton	35,279
Harrison	1,368
Hartwell	2,823
Hicksville	2,395
Hillsboro	4,296
Holgate	1,095
Hubbard	1,699
Hudson	1,021
Huron	1,756
Irondale	1,250
Ironton	13,147
Jackson	5,468
Jacksonville	1,285
Jamestown	1,133
Jefferson	1,461
Kelleys Island	1,017
Kenmore	1,561
Kent	4,488
Kenton	7,185
Lakewood	15,181
Lancaster	13,093
Lebanon	2,698
Leetonia	2,665
Leipsic	1,773
Lima	30,508
Lisbon	3,084
Lockland	3,439
Lodi	1,015
Logan	4,850
London	3,530
Lorain	28,883
Loudonville	1,804
Louisville	1,678
Loveland	1,421
Lowellville	1,592
McArthur	1,107
McComb	1,088
McConnelsville	1,831
Madisonville	5,193
Manchester	1,966
Mansfield	20,768
Marblehead	1,172
Marietta	12,923
Marion	18,232
Martins Ferry	9,133
Marysville	3,576
Massillon	13,879
Maumee	2,307
Mechanicsburg	1,446
Medina	2,734
Miamisburg	4,271
Middleport	3,194
Middletown	13,152
Milford	1,321
Millersburg	2,020
Milo	2,000
Mineral City	1,032
Minerva	1,396
Mingo Jc	4,049
Minster	1,583
Monroeville	1,152
Montpelier	2,759
Mount Gilead	1,673
Mount Healthy	1,799
Mount Sterling	1,071
Mount Vernon	9,087
Murray	1,386
Napoleon	4,007
Navarre	1,357
Nelsonville	6,082
Newark	25,404
New Boston	1,858
New Bremen	1,586
Newburg	5,813
New Carlisle	1,058
New Comerstown	2,943
New Lexington	2,559
New London	1,557
New Philadelphia	8,542
New Richmond	1,733
New Straitsville	2,242
Niles	8,361
North Baltimore	2,503
North Lawrence	1,200
North Olmsted	1,030
Norwalk	7,858
Norwood	16,185
Nottingham	2,387
Oakharbor	1,559
Oak Hill	1,148
Oakley	1,639
Oberlin	4,365
Orrville	3,101
Ottawa	2,182
Oxford	2,017
Painesville	5,501
Paulding	2,081
Payne	1,207
Pemberville	1,006
Perrysburg	1,913
Piqua	13,388
Plain City	1,407
Pleasant Ridge	1,769
Plymouth	1,314
Pomeroy	4,023
Port Clinton	3,007
Portsmouth	23,481
Prairie Depot	1,350
Ravenna	5,310
Reading	3,985
Richwood	1,729
Ripley	1,840
Rockford	1,186
Rockport	3,179
Rocky River	1,174
Roseville	2,113
Rossford	1,000
Sabina	1,514
St. Bernard	5,002
St. Clairsville	1,393
St. Marys	5,732
St. Paris	1,261
Salem	8,943
Salineville	2,403
Sandusky	19,989
Sciotoville	1,300
Sebring	2,104
Sekitan	1,700
Shawnee	2,280
Shelby	4,903
Shreve	1,016
Sidney	6,607
Somerset	1,286
South Charleston	1,181
South Newburg	1,273
Spencerville	1,748
Springfield	46,921
Steubenville	22,391
Struthers	3,370
Stryker	1,026
Swanton	1,058
Sylvania	1,002
Syracuse	1,250
Tiffin	11,894
Tippecanoe City	2,038
Toledo	168,497
Toronto	4,271
Troy	6,122
Uhrichsville	4,751
Union City	1,595
Upper Sandusky	3,779
Urbana	7,739
Utica	1,729
Van Wert	7,157
Vermilion	1,369
Versailles	1,580
Wadsworth	3,073
Wapakoneta	5,349
Warren	11,081
Washington Court House	7,277
Wauseon	2,650
Waverly	1,803
Wellington	2,131
Wellston	6,875
Wellsville	7,769
West Alexandria	1,030
West Carrollton	1,285
Westerville	1,903
West Jefferson	1,043
West Liberty	1,288
West Milton	1,207
West Toledo	2,500
West Union	1,080
Willoughby	2,072
Wilmington	4,491
Woodsfield	2,502
Wooster	6,136
Wyoming	1,893
Xenia	8,706
Yellow Springs	1,360
Youngstown	79,066
Zanesville	28,026
OKLAHOMA	
Ada	4,349
Afton	1,279
Altus	4,821
Alva	3,688
Anadarko	3,439
Antlers	1,273
Ardmore	8,618
Atoka	1,968
Bartlesville	6,181
Blackwell	3,266
Boley	1,334
Bristo	1,667
Broken Arrow	1,576
Caddo	1,143
Capitol Hill	1,500
Chandler	2,024
Checotah	1,683
Chelsea	1,350
Cherokee	2,016
Chickasha	10,320
Claremore	2,866
Cleveland	1,310

OKLAHOMA Cont'd.		OKLAHOMA Cont'd.		PENN. Cont'd.		PENN. Cont'd.		PENN. Cont'd.	
Clinton	2,781	Tecumseh	1,626	Antrim	1,500	Castle Shannon	2,600	East Stroudsburg	3,330
Coalgate	3,255	Thomas	1,371	Apollo	3,006	Catasauqua	5,250	East Vandergrift	1,852
Collinsville	1,324	Tishomingo	1,408	Arcadia	1,400	Catawissa	1,930	East Washington	1,300
Comanche	1,301	Tonkawa	1,776	Archbald	7,194	Cecil	1,500	Ebensburg	1,978
Cordell	1,950	Tulsa	18,182	Ardmore	3,800	Cementon	2,000	Eddystone	1,167
Coweta	1,187	Vinita	4,082	Arnold	1,818	Centerville	1,413	Edgewood	2,596
Cushing	1,072	Wagoner	4,018	Arnot	3,500	Centralia	2,429	Edgeworth	1,229
Davis	1,416	Walter	1,377	Ashland	6,855	Chambersburg	11,800	Edwardsville	8,407
Dewey	1,344	Watonga	1,723	Ashley	5,601	Charleroi	9,615	Egypt	1,000
Duncan	2,477	Waurika	2,928	Aspinwall	2,592	Cherry Valley	1,400	Eldred	1,235
Durant	5,330	Waynoka	1,160	Athens	3,796	Chester	38,537	Elizabeth	2,311
Edmond	2,090	Weatherford	2,118	Atlas	1,000	Chicora	1,700	Elizabethtown	2,587
Elk City	3,165	Weleetka	1,229	Audenried	5,000	Clairton	3,326	Elizabethville	1,039
El Reno	7,872	Wetumka	1,190	Austin	2,941	Claridge	2,200	Elkland	1,175
Enid	13,799	Wewoka	1,022	Avalon	4,317	Clarion	2,612	Elk Lick	1,200
Eufaula	1,307	Wilburton	2,277	Avoca	4,634	Claysville	1,045	Elliott	4,200
Fairview	2,020	Woodward	2,696	Avonmore	1,262	Clearfield	6,851	Ellsworth	2,084
Fort Gibson	1,344	Wynnewood	2,002	Baggaley	1,000	Clifton Heights	3,155	Ellwood City	3,902
Fort Sill	2,500	Yukon	1,018	Bangor	5,369	Clymer	1,753	Elmora	1,000
Frederick	3,027			Banksville	1,300	Coaldale	5,154	Emaus	3,501
Geary	1,452	OREGON		Barnesboro	3,535	Coatesville	11,084	Emlenton	1,110
Glenpool	1,500	Albany	4,275	Bath	1,057	Cokeburg	1,302	Emporium	2,916
Granite	1,229	Ashland	5,020	Beaver	3,456	College Hill	1,787	Emsworth	1,510
Grayson	1,000	Astoria	9,599	Beaverdale	1,200	Collingdale	1,361	Ephrata	3,192
GUTHRIE	11,654	Baker City	6,742	Beaver Falls	12,191	Colona	1,000	Erie	66,525
Guymon	1,342	Bandon	1,803	Beaver Meadows	1,530	Columbia	11,454	Ernest	1,000
Haileyville	2,024	Condon	1,009	Bedford	2,235	Colwyn	1,584	Etna	5,830
Hartshorne	2,963	Coquille	1,398	Beechview	1,500	Conemaugh	3,500	Evansburg	1,339
Hennessey	1,665	Corvallis	4,552	Bellefonte	4,145	Connellsville	12,845	Evans City	1,600
Henryetta	1,671	Cottage Grove	1,834	Belle Vernon	2,372	Conshohocken	7,480	Everett	1,725
Hobart	3,845	Dallas	2,124	Bellevue	6,323	Conway	1,483	Everson	1,759
Holdenville	2,296	Elgin	1,120	Bellwood	2,277	Coplay	2,670	Excelsior	1,650
Hugo	4,582	Enterprise	1,242	Ben Avon	1,828	Coraopolis	5,252	Exeter	3,537
Idabel	1,493	Eugene	9,009	Bennett	8,000	Corry	5,991	Exeter Borough	2,000
Kiefer	1,197	Forest Grove	1,772	Bentleyville	1,922	Coudersport	3,100	Expedit	1,500
Kingfisher	2,538	Grants Pass	3,897	Berlin	1,336	Crafton	4,583	Export	3,000
Kiowa	1,021	Hillsboro	2,016	Berwick	5,357	Cresson	1,470	Fairchance	1,760
Krebs	2,884	Hood River	2,331	Berwyn	1,000	Cressona	1,837	Falls Creek	1,204
Lawton	7,788	Independence	1,160	Bethlehem	12,837	Curwensville	2,549	Fayette City	2,005
Lehigh	1,880	Klamath Falls	2,758	Bigrun	1,032	Dale, Berks Co.	1,000	Federal	1,000
Lindsay	1,156	La Grande	4,843	Birdsboro	2,930	Dale, Cambria Co.	2,285	Fleetwood	1,394
McAlester	12,954	Lakeview	1,253	Black Lick	1,500	Dallastown	1,884	Flemington	1,022
Madill	1,564	Lebanon	1,820	Blairsville	3,572	Danielsville	1,000	Ford City	4,850
Mangum	3,667	Linnton	1,165	Blakely	5,345	Danville	7,517	Forest City	5,749
Marietta	1,546	McMinnville	2,400	Blandburg	1,800	Darby	6,305	Fortyfort	2,353
Marlow	1,965	Marshfield	2,980	Bloomsburg	7,413	Darragh	1,500	Fountain Hill	1,388
Medford	1,110	Medford	8,840	Blossburg	2,303	Denver	1,000	Frackville	3,118
Miami	2,907	Milton	1,280	Boswell	1,878	Derry	2,954	Franklin, Cambria Co.	2,102
Muskogee	25,278	Mount Tabor	1,500	Boyertown	2,433	Dickson City	9,331	Franklin, Venango Co.	9,767
Newkirk	1,992	Newberg	2,260	Brackenridge	3,134	Dixmont	1,200	Fredericktown	1,000
Norman	3,724	North Bend	2,078	Braddock	19,357	Donaldson	1,100	Freedom	3,060
Nowata	3,672	Ontario	1,248	Bradenville	1,000	Donora	8,174	Freeland	6,197
Okemah	1,389	Oregon City	4,287	Bradford	14,544	Dormont	1,115	Freeport	2,248
Oklahoma	64,205	Oswego	1,107	Bridgeport, Fayette Co.	3,400	Dorranceton	4,046	Gaines	1,000
Okmulgee	4,176	Pendleton	4,460	Bridgeport, Montgomery Co.	3,860	Downingtown	3,326	Galeton	4,027
Pauls Valley	2,689	Portland	207,214	Bridgeville	1,983	Doylestown	3,304	Gallitzin	3,504
Pawhuska	2,776	Prineville	1,042	Bridgewater	1,562	Dravosburg	1,895	Gettysburg	4,030
Pawnee	2,161	Rainier	1,359	Bristol	9,256	Drifton	2,500	Gilberton	5,401
Perry	3,133	Roseburg	4,738	Brockwayville	1,898	Dubois	12,623	Gillespie	1,000
Ponca	2,521	St. Johns	4,872	Brookville	3,003	Dunbar	1,970	Girard	1,165
Pondcreek	1,113	SALEM	14,094	Broughton	2,000	Duncannon	1,474	Girardville	4,396
Poteau	1,830	Seaside	1,121	Brownfield	1,500	Duncansville	1,263	Gladwyne	1,000
Prague	1,025	Sheridan	1,021	Brownstown	1,300	Dunlo	2,500	Glassmere	1,200
Pryor	1,798	Silverton	1,588	Brownsville	2,324	Dunmore	17,615	Glassport	5,540
Purcell	2,740	Springfield	1,838	Bryn Mawr	3,100	Duquesne	15,727	Glen Campbell	1,099
Roff	1,044	The Dalles	4,880	Bulger	1,200	Duryea	7,487	Glenlyon	3,500
Ryan	1,207	Tillamook	1,352	Burgettstown	1,268	East Altoona	1,200	Glen Olden	1,157
Sallisaw	2,479	Union	1,483	Butler	20,728	East Bangor	1,186	Glen Rock	1,263
Sapulpa	8,283	Woodburn	1,616	California	2,230	East Brady	1,493	Glenside	1,500
Sayre	1,881			Cambridge Sprs.	1,514	East Conemaugh	5,046	Gordon	1,185
Shattuck	1,231	PENNSYLVANIA		Canonsburg	3,891	East Downingtown	2,000	Grassflat	1,000
Shawnee	12,474	Albion	1,534	Canton	1,637	East Greensburg	1,500	Greencastle	1,919
Snyder	1,122	Aliquippa	1,743	Carbondale	17,040	East Greenville	1,235	Greensburg	13,012
Spiro	1,173	Allenport	1,500	Carlisle	10,303	East McKeesport	2,118	Green Tree	1,143
Stigler	1,583	Allentown	51,913	Carnegie	10,009	East Mauch Chunk	3,548	Greenville	5,909
Stillwater	3,444	Altoona	52,127	Carrick	6,117	Easton	28,523	Grove City	3,674
Stillwell	1,039	Ambler	2,649	Carrolltown	1,348	East Pittsburg	5,615	Hallstead	1,538
Stroud	1,220	Ambridge	5,205	Cartwright	1,000			Hamburg	2,301
Sulphur	3,684	Anita	3,000						
Tahlequah	2,89	Annville	3,000						

PENN. Cont'd.		PENN. Cont'd.		PENN. Cont'd.		PENN. Cont'd.		PENN. Cont'd.	
Hanover	7,057	McAdoo	3,389	Nazareth	3,978	Pricedale	1,000	South Waverly	1,084
HARRISBURG.	64,186	McDonald	2,543	Nescopeck	1,578	Prospect Park	1,655	Southwest	1,500
Hastings	2,125	McKeesport	42,694	Nesquehoning	2,500	Punxsutawney	9,058	Southwest Greensburg	2,127
Hawley	2,018	McKees Rocks	14,702	New Bethlehem	1,625	Quakertown	3,801		
Hays	1,888	McSherrystown	1,724	New Bloomfield	1,000	Radnor	3,000	South Williamsport	3,734
Hazeldell	1,168	Macdonaldton	1,000	New Brighton	8,329	Ramey	1,045		
Hazelhurst	1,000	Madera	1,200	Newcastle	36,280	Rankin Station	6,042	Spangler	2,700
Hazleton	25,452	Mahanoy City	15,936	Newcomer	1,000	Rathmel	1,000	Spring City	2,880
Heidelburg	1,848	Mahonoy Plane	2,000	New Cumberland	1,472	Reading	96,071	Springdale	1,999
Heilwood	1,000	Maltby	2,700	Newhaven	2,600	Redlion	2,092	Springforge	1,500
High Spire	1,669	Malvern	1,125	New Holland	1,106	Renovo	4,621	Spring Garden	1,100
Hollidaysburg	3,734	Mammoth	1,000	New Hope	1,083	Republic	1,000	Spring Grove	1,152
Homestead	18,713	Manheim	2,202	New Kensington	7,707	Reynoldsville	3,189	Starjunction	3,000
Honesdale	2,945	Manor	1,039	New Philadelphia	2,512	Richland Center	1,000	State College	1,425
Horatio	1,200	Mansfield	1,645	Newport	2,009	Ridgway	5,408	Steelton	14,246
Houtzdale	1,434	Marcus Hook	1,573	Newtown	1,675	Ridley Park	1,761	Stoneboro	1,074
Hudson	2,000	Marianna	1,363	Newville	1,449	Roaring Spring	1,903	Stroudsburg	4,379
Hughestown	2,024	Marienville	1,300	Noblestown	1,000	Rochester	5,903	Sturgeon	1,200
Hughesville	1,650	Marietta	2,079	Norristown	27,875	Rockdale	1,500	Sugar Notch	2,439
Hummelstown	2,128	Marion Hgts	1,362	Northampton	8,729	Rockwood	1,300	Summithill	4,209
Huntingdon	6,861	Mars	1,215	Northampton Heights	1,037	Ronco	1,000	Sunbury	13,770
Hyndman	1,164	Marsteller	1,000			Roscoe	1,450	Susquehanna	3,478
Indiana	5,749	Marysville	1,693	North Belle Vernon	1,522	Rose Bud	1,000	Swarthmore	1,899
Ingram	2,037	Matamoras	1,388			Rosemont	1,000	Swissvale	7,381
Irwin	2,886	Mauch Chunk	3,952	North Braddock	11,824	Rossiter	3,000	Swoyers	2,850
Jeanesville	1,300	Mayfield	3,662	North Catasauqua	2,030	Roulette	1,500	Swoyersville	5,396
Jeannette	8 077	Meadville	12,780	North Charleroi	1,008	Roxbury	1,000	Sygan	1,500
Jenkintown	2,968	Mechanicsburg	4,469	North East	2,672	Royalton	1,033	Sykesville	1,756
Jermyn	3,158	Media	3,562	Northumberland	3,517	Royersford	3,073	Tamaqua	9,462
Jerome	1,000	Mercer	2,026	North Wales	1,710	Sabula	1,300	Tarentum	7,414
Jersey Shore	5,381	Mercersburg	1,410	North York	1,902	Sagamore	2,100	Taylor	9,060
Jessup	1,300	Meyersdale	3,741	Norwood	1,668	St. Clair, Alleghany Co	5,640	Throop	5,133
Johnsonburg	4,334	Middleport	1,100	Norwood Station	1,400			Tidioute	1,324
Johnstown	55,482	Middletown	5,374	Oakdale	1,353	St. Clair, Schuylkill Co	6,455	Titusville	8,533
Josephine	4,850	Midland	1,244	Oakmont	3,436			Towanda	4,281
Juniata	5,285	Mifflin	1,050	Oil City	15,657	St. Marys	6,346	Tower City	2,325
Kane	6,626	Millinburg	1,559	Oldforge	11,324	St. Nicholas	1,200	Trafford	1,959
Kaylor	1,000	Millersburg	2,394	Oliver	1,000	Saltsburg	1,044	Trauger	1,200
Keister Works	1,200	Millersville	2,000	Olyphant	8,505	Sarver	1,150	Tremont	2,067
Kelayres	1,500	Millhall	1,043	Oneida	1,200	Saxton	1,195	Treveskyn	2,500
Kennett Square	2,049	Millsboro	1,000	Orient	1,600	Sayre	6,426	Trevorton	2,000
Kingston	6,449	Millvale	7,861	Orwigsburg	1,801	Scalp Level	1,424	Troy	1,288
Kittanning	4,311	Milroy	1,500	Osceola Mills	2,437	Schuylkill Haven	4,747	Tunkhannock	1,598
Knoxville	5,651	Milton	7,460	Oxford	2,390	Scottdale	5,456	Turtle Creek	4,995
Kutztown	2,360	Miners Mills	3,159	Palmerton	1,000	Scranton	129,867	Tyler	1,500
LaBelle	1,000	Minersville	7,240	Palmyra	2,000	Selinsgrove	1,473	Tyrone	7,176
Lakemont	1,200	Minooka	3,000	Palo Alto	1,873	Sellersville	1,572	Uledi	1,500
Lancaster	47,227	Mohnton	1,536	Parkers Landing	1,244	Sewickley	4,479	Union City	3,684
Lansdale	3,551	Monaca	3,376	Parkesburg	2,522	Shaft	1,600	Uniontown	13,344
Lansdowne	4,066	Monessen	11,775	Parnassus	2,578	Shamokin	19,588	Upland	2,221
Lansford	8,321	Monongahela	7,598	Parsons	4,338	Sharon	15,270	Vanderbilt	1,198
Larimer	1,700	Montgomery	1,490	Patton	3,907	Sharon Hill	1,401	Vandergrift	3,876
Larksville	9,288	Montoursville	1,904	Peckville	4,200	Sharpsburg	8,153	Vandergrift Heights	3,438
Latrobe	8,777	Montrose	1,914	Pecly	1,000	Sharpsville	3,634		
Lattimer Mines	1,500	Moon Run	1,200	Pen Argyl	3,967	Sheffield	1,900	Verona	2,849
Lebanon	19,240	Moores	1,800	Penbrook	1,462	Shenandoah	25,774	Versailles	1,487
Leechburg	3,624	Moosic	3,964	Penn	1,048	Sheppton	1,000	Vintondale	1,410
Leetsdale	1,904	Morann	1,000	Pennsburg	1,141	Sheridan	1,000	Wall	1,962
Lehighton	5,316	Morgan	3,000	Penns Station	1,500	Sheridanville	3,000	Walnutport	1,039
Leisenring	1,050	Morganza	1,000	Perkasie	2,779	Shickshinny	1,917	Walston	2,000
Lemont Furnace'	1,100	Morris Run	2,300	Philadelphia	1,549,008	Shillington	1,427	Wanamie	1,500
Lemoyne	1,393	Morrisville	2,002	Philipsburg	3,585	Shinglehouse	1,598	Warren	11,080
Lewisburg	3,081	Morton	1,071	Phoenixville	10,743	Shippensburg	3,457	Warrendale	1,000
Lewistown	8,166	Mountaintop	1,200	Pinegrove	1,352	Siegfried	2,800	Warrior Run	1,251
Ligonier	1,575	Mount Braddock	1,000	Pitcairn	4,975	Silverbrook	1,200	Washington	18,778
Lilly	1,638	Mount Carmel	17,532	Pittock	1,500	Silver Creek	1,700	Watsontown	1,950
Lincoln Place	1,000	Mount Holly Springs	1,272	Pittsburg	533,905	Simpson	2,200	Wayne	3,000
Lindsey	2,500			Pittston	16,267	Siverly	1,616	Waynesboro	7,199
Lititz	2,082	Mount Jewett	1,771	Plains	2,000	Slatington	4,454	Waynesburg	3,545
Littlestown	1,347	Mount Joy	2,166	Plymouth	16,996	Smethport	1,817	Weatherly	2,501
Lock Haven	7,772	Mount Oliver	4,241	Point Marion	1,389	Smock	1,000	Webster	1,000
Locustdale	1,000	Mount Pleasant	5,812	Polk	2,066	Somerset	2,612	Wellsboro	3,183
Locustgap	1,700	Mount Union	3,338	Portage	2,954	Souderton	1,875	Wendel	1,000
Lopez	1,400	Muncy	1,904	Port Allegany	1,972	South Allentown	1,814	West Berwick	5,512
Lost Creek	1,500	Munhall	5,185	Port Carbon	2,678	South Bethlehem	19,973	West Bethlehem	4,400
Louperex	1,000	Myerstown	3,800	Port Kennedy	1,000	South Brownsville	3,943	West Bridgewater	1,500
Loyalsock	1,050	Nanticoke	18,877	Port Perry	1,300	South Canonsburg	1,697	West Brownsville	2,036
Luzerne	5,426	Nanty Glo	1,000	Portvue	1,978	Southfork	4,592	West Chester	11,767
Lykens	2,943	Narberth	1,790	Pottstown	15,599	South Greensburg	1,748	West Conshohocken	2,202
Lyndora	3,000	Natrona	4,000	Pottsville	20,236	South Sharon	10,190		

PENN. Cont'd.		RHODE IS. Cont'd.		SO. CAROLINA Cont'd.		TENNESSEE Cont'd.		TEXAS	
West Easton	1,033	Phenix	2,400	Rockhill	7,216	Cookeville	1,848	Abilene	9,204
West Fairview	1,300	Pontiac	1,900	St. Matthews	1,377	Copper Hill	1,500	Alba	1,200
Westfield	1,207	Portsmouth	2,400	Seneca	1,313	Covington	2,990	Albany	2,000
Westgrove	1,261	PROVIDENCE	224,326	Spartanburg	17,517	Dayton	1,991	Alice	2,361
West Hazleton	4,715	River Point	3,500	Summerville	2,355	Decherd	1,022	Alice	2,136
West Homestead	3,009	Riverside	2,000	Sumter	8,109	Dickson	1,850	Alpine	1,500
West Leisenring	1,200	Slatersville	1,850	Timmonsville	1,708	Ducktown	1,500	Alvarado	1,155
West Liberty	2,000	Tiverton	1,950	Union	5,623	Dunlap	1,166	Alvin	1,453
West Middlesex	1,157	Valley Falls	2,400	Walhalla	1,595	Dyer	1,166	Alvord	2,000
Westmont	1,468	Wakefield	2,750	Walterboro	1,677	Dyersburg	4,149	Amarillo	9,957
West Newton	2,880	Warren	6,450	Westminster	1,576	East Chattanooga	5,000	Angleton	1,500
West Pittsburg	1,000	Westerly	8,100	Whitmire	1,045	Elizabethton	2,478	Anson	1,842
West Pittston	6,848	Wickford	1,050	Williamston	1,957	Erwin	1,149	Aransas Pass	1,197
West Reading	2,064	Woonsocket	38,125	Winnsboro	1,754	Etowah	1,685	Arlington	1,794
West View	1,626	SOUTH CAROLINA		Woodruff	1,880	Fayetteville	3,439	Athens	2,261
West Washington	3,400			Yorkville	2,326	Franklin	2,924	Atlanta	1,604
West Wyoming	1,621	Abbeville	4,459			Gallatin	2,399	AUSTIN	29,860
West York	2,435	Aiken	3,911	SOUTH DAKOTA		Goodlettsville	1,000	Baird	1,710
Whitaker	1,547	Allendale	1,453			Greeneville	1,920	Ballinger	3,536
Whitehaven	1,438	Anderson	9,654	Aberdeen	10,753	Greenfield	1,516	Bartlett	1,815
White Mills	2,200	Bamberg	1,937	Bellefourche	1,352	Harriman	3,061	Bastrop	1,707
Wickboro	2,775	Barnwell	1,324	Beresford	1,117	Hartsville	1,000	Bay City	3,156
Wiconisco	3,000	Batesburg	1,995	Brookings	2,971	Henderson	1,087	Beaumont	20,640
Wilburton	1,200	Beaufort	2,486	Canton	2,103	Humboldt	3,446	Beeville	3,269
Wilcox	1,300	Belton	1,652	Chamberlain	1,275	Huntingdon	1,112	Bellville	1,500
Wilkes Barre	67,105	Bennettsville	2,646	Clark	1,220	Jackson	15,779	Belton	4,164
Wilkinsburg	18,924	Bishopville	1,659	Dallas	1,277	Jasper	1,000	Big Sandy	1,200
William Penn	1,100	Blacksburg	1,119	Deadwood	3,653	Jefferson City	1,328	Big Spring	4,102
Williamsburg	1,523	Blackville	1,278	Dell Rapids	1,367	Jellico	1,862	Bonham	4,844
Williamsport	31,860	Branchville	1,471	Desmet	1,063	Johnson City	8,502	Bowie	2,874
Williamstown	2,904	Camden	3,569	Elkpoint	1,200	Knoxville	36,346	Brackettville	2,100
Wilmerding	6,133	Charleston	58,833	Flandreau	1,484	Lafollette	2,816	Brady	2,669
Wilson	1,108	Cheraw	2,873	Gregory	1,142	Lawrenceburg	1,687	Breckenridge	1,000
Winburne	3,000	Chester	4,754	Groton	1,108	Lebanon	3,659	Bremond	1,000
Windber	8,013	Clifton	1,700	Highmore	1,084	Lenoir City	3,392	Brenham	4,718
Winton	5,280	Clinton	3,272	Hot Springs	2,140	Lewisburg	1,830	Bridgeport	2,000
Womelsdorf	1,301	Clover	1,207	Howard	1,026	Lexington	1,497	Bronson	1,000
Woodland	1,200	COLUMBIA	26,319	Huron	5,791	Livingston	1,421	Brownsville	10,517
Woodlawn	1,396	Converse	1,000	Lake Preston	1,007	Lonsdale	2,391	Brownwood	6,967
Wrightsville	2,051	Conway	1,228	Lead	8,392	McKenzie	1,322	Bryan	4,132
Wyoming	3,010	Cowpens	1,101	Lemmon	1,255	McMinnville	2,299	Burkburnett	1,500
Yatesboro	2,000	Darlington	3,789	Madison	3,137	Martin	2,228	Caldwell	1,476
York	44,750	Denmark	1,075	Milbank	2,015	Maryville	2,381	Call	1,000
Youngsville	1,406	Dillon	1,757	Miller	1,202	Memphis	131,105	Calvert	2,579
Youngwood	1,881	Easley	2,983	Mitchell	6,515	Milan	1,605	Cameron	3,263
Yukon	1,000	Eau Claire	1,234	Mobridge	1,200	Monterey	1,107	Canadian	1,648
Zelienople	1,388	Edgefield	1,771	Parker	1,224	Morristown	4,007	Canyon	1,400
RHODE ISLAND		Enoree	1,000	PIERRE	3,656	Mountain View	1,436	Caro	1,250
		Florence	7,057	Platte	1,115	Mountpleasant	1,973	Carthage	2,250
Anthony	1,500	Fort Mill	1,616	Rapid City	3,854	Murfreesboro	4,679	Center	1,684
Apponang	1,300	Gaffney	4,767	Redfield	3,060	NASHVILLE	110,364	Chico	1,200
Arctic	3,100	Georgetown	5,530	Salem	1,097	Newbern	1,602	Childress	3,818
Ashaway	1,200	Graniteville	2,500	Scotland	1,102	Newport	2,003	Chillicothe	1,207
Ashton	1,400	Greenville	15,741	Sioux Falls	14,094	Obion	1,293	Cisco	2,410
Block Island	1,200	Greenwood	6,614	Sisseton	1,397	Orchard Knob	1,000	Clarendon	1,946
Bristol	8,450	Greer	1,673	Spearfish	1,130	Paris	3,881	Clarksville	2,065
Centerdale	1,250	Hartsville	2,365	Sturgis	1,739	Park	5,126	Cleburne	10,364
Centerville	2,800	Honeapath	1,763	Tyndall	1,107	Petros	1,000	Cleveland	1,000
Central Falls	22,754	Johns Island	1,000	Vermilion	2,187	Pulaski	2,928	Clifton	1,137
Chepachet	1,200	Kingstree	1,372	Watertown	7,010	Ridgedale	1,500	Coleman	3,046
Cranston	21,171	Lake City	1,074	Webster	1,713	Ripley	2,011	Colorado	1,840
Crompton	1,800	Lancaster	2,098	Wessington	1,093	Rockwood	3,660	Columbus	2,500
East Greenwich	3,420	Langley	1,000	Woonsocket	1,027	Rogersville	1,242	Comanche	2,756
East Providence	13,500	Latta	1,358	Yankton	3,787	St. Elmo	2,426	Commerce	2,818
Georgiaville	1,000	Laurens	4,818			Savannah	2,100	Conroe	1,374
Harrisville	2,200	Liberty	1,058	TENNESSEE		Shelbyville	2,869	Cooper	1,513
Hills Grove	1,200	Lockhart	2,000			Soddy	1,200	Corpus Christi	8,222
Hope	1,250	McColl	1,628	Athens	2,264	Somerville	1,387	Corsicana	9,749
Jamestown	1,175	Manning	1,854	Avondale	1,000	South Fulton	1,391	Cotulla	1,880
Lonsdale	1,900	Marion	3,844	Binghamton	1,673	South Pittsburg	2,106	Crockett	3,947
Manville	2,100	Meggett	1,000	Bolivar	1,070	Sparta	1,409	Crowell	1,341
Middletown	1,600	Moultrieville	1,011	Briceville	1,400	Spring City	1,039	Cuero	3,109
Narragansett Pier	1,250	Mount Pleasant	1,346	Bristol	7,148	Springfield	2,085	Cushing	1,900
Natick	5,000	Mullins	1,832	Brownsville	2,882	Sweetwater	1,850	Daingerfield	1,000
Newport	27,149	Navy Yard	1,000	Centerville	1,097	Tracy City	3,100	Dalhart	2,580
North Scituate	1,050	Newberry	5,028	Chattanooga	44,604	Trenton	2,402	Dallas	92,104
North Tiverton	1,650	North Augusta	1,136	Clarksville	8,548	Tullahoma	3,049	Decatur	1,651
Pascoag	3,000	Orangeburg	5,906	Cleveland	5,549	Union City	4,389	DeKalb	1,000
Pawtucket	51,622	Pelzer	6,000	Clinton	1,090	Whitwell	3,000	De Leon	1,015
Peace Dale	1,550	Piedmont	4,000	Coal Creek	1,102	Winchester	1,351	Del Rio	7,200
				Columbia	5,754				

TEXAS Cont'd.	
Denison	13,632
Denton	4,732
Detroit	2,000
Devine	1,042
Dublin	2,551
Eagle Lake	1,717
Eagle Pass	3,536
Edna	1,700
El Campo	1,778
Elgin	1,707
El Paso	39,279
Ennis	5,669
Falfurrias	1,400
Farmersville	1,848
Ferris	1,233
Floresville	1,398
Forney	1,114
Fort Worth	73,312
Franklin	1,200
Fredericksburg	2,000
Gainesville	7,624
Galveston	36,981
Gatesville	1,929
Georgetown	3,096
Giddings	2,000
Gilmer	1,484
Glen Rose	2,000
Goldthwaite	1,129
Goliad	2,100
Gonzales	3,139
Goree	1,000
Graham	1,569
Granbury	1,336
Grand Saline	1,065
Grand View	1,018
Granger	1,708
Grayburg	1,000
Greenville	8,850
Groesbeck	1,454
Groveton	4,600
Guffey	1,000
Hallettsville	1,379
Hamilton	1,548
Hamlin	1,978
Harlingen	1,000
Haskell	2,436
Hearne	2,352
Hempstead	2,600
Henderson	3,200
Henrietta	2,104
Hereford	1,750
Hico	1,437
Higgins	1,200
Hillsboro	6,115
Hohdo	2,500
Honey Grove	2,300
Houston	78,800
Houston Hgts	6,984
Hubbard	1,843
Humble	2,300
Huntsville	2,072
Italy	1,149
Itasca	1,356
Jacksboro	1,480
Jacksonville	2,875
Jefferson	2,515
Johnson City	1,000
Karnes City	1,150
Kaufman	1,950
Keltys	1,000
Kemp	1,500
Kenedy	1,147
Kenneth	1,000
Kerrville	1,843
Killeen	1,265
Kingsville	1,500
Kirbyville	2,100
Knox City	1,200
Ladonia	1,293
La Grange	1,850

TEXAS Con'd.	
Lamesa	1,000
Lampasas	2,115
Lancaster	1,115
Laredo	14,855
Lexington	1,600
Livingston	1,700
Llano	1,687
Lockhart	2,945
Longview	5,155
Lott	1,021
Lubbock	1,938
Lufkin	2,749
Luling	1,404
Lyra	1,194
McGregor	1,864
McKinney	4,714
Mabank	1,700
Madisonville	1,600
Marble Falls	1,061
Marion	1,200
Marlin	3,878
Marshall	11,452
Mart	2,939
Mason	1,200
Memphis	1,936
Mercedes	1,209
Merkel	2,008
Mexia	2,694
Midland	2,192
Miles	1,302
Mineola	1,706
Minera	1,000
Mineral Wells	3,950
Mingus	1,000
Mount Pleasant	3,137
Mount Vernon	1,600
Nacogdoches	3,369
Naples	1,178
Navasota	3,284
New Boston	2,100
New Braunfels	3,165
Newton	1,200
Nixon	1,000
Nocona	1,338
North Fort Worth	3,000
Odessa	1,000
Olney	1,095
Omaha	1,200
Orange	5,527
Ozona	1,200
Paducah	1,350
Palacios	1,389
Palestine	10,482
Paris	11,269
Pearsall	1,799
Pecos	1,856
Pilot Point	1,371
Pittsburg	1,916
Plainview	2,829
Plano	1,258
Port Arthur	7,663
Port Lavaca	1,699
Quanah	3,127
Ranger	1,000
Richmond	1,371
Rio Grande	2,300
Robert Lee	1,800
Rockdale	2,073
Rockport	1,382
Rockwall	1,136
Rogers	1,275
Rosebud	1,472
Rosenberg	1,198
Rotan	1,126
Royse City	1,210
Runge	1,200
Rusk	1,558
Sabinal	1,640
San Angelo	10,321

TEXAS Cont'd.	
San Antonio	96,614
San Augustine	1,204
San Benito	1,000
San Diego	2,500
San Marcos	4,071
San Saba	1,500
Santa Anna	1,453
Saratoga	1,000
Schulenburg	1,091
Sealy	1,700
Seguin	3,116
Seymour	2,029
Shafter	1,000
Sherman	12,412
Shiner	1,096
Sinton	1,500
Skidmore	1,000
Smiley	1,000
Smithville	3,167
Snyder	2,514
Socorro	1,147
Somerville	2,500
Sourlake	6,000
Stamford	3,902
Stanton	1,400
Stephenville	2,561
Stockdale	1,250
Strawn	1,000
Sulphur Springs	5,151
Sweet Water	4,176
Talpa	1,200
Taylor	5,314
Teague	3,288
Temple	10,993
Terrell	7,050
Texarkana	9,790
Thurber	4,500
Timpson	1,528
Tioga	1,600
Toyah	1,052
Troup	1,126
Tulia	1,216
Tyler	10,400
Uvalde	3,998
Van Alstyne	1,441
Velasco	1,500
Vernon	3,195
Victoria	3,673
Waco	26,425
Waelder	1,400
Walnut Springs	1,340
Waxahachie	6,205
Weatherford	5,074
West	1,645
Wharton	1,505
Whitesboro	1,219
Whitewright	1,563
Wichita Falls	8,200
Willis	1,500
Wills Point	1,398
Winnsboro	1,741
Winters	1,347
Wolfe City	1,402
Yoakum	4,657
Yorktown	1,180
Ysleta	2,000

UTAH

American Fork	2,797
Beaver	1,899
Bingham Canyon	2,881
Bountiful	1,677
Brigham	3,685
Castlegate	1,500
Cedar City	1,705
Draper	1,000
Ephraim	2,296
Eureka	3,416
Fairview	1,218

UTAH Cont'd.	
Farmington	1,231
Fillmore	1,202
Forest Dale	1,549
Grantsville	1,154
Heber	2,031
Hooper	1,300
Hyrum	1,833
Lehi	2,964
Logan	7,522
Manti	2,423
Mercur	1,047
Midvale	1,760
Milford	1,014
Mill Creek	2,300
Miller	1,200
Monroe	1,227
Moroni	1,223
Mount Pleasant	2,280
Murray	4,057
Nephi	2,759
North Ogden	1,000
Ogden	25,580
Panguitch	1,338
Park City	3,439
Parowan	1,156
Payson	2,397
Plain City	1,000
Pleasant Grove	1,618
Price	1,021
Providence	1,020
Provo	8,925
Richfield	2,559
Richmond	1,562
St. George	1,769
Salina	1,082
SALT LAKE CITY	92,777
Sandy	1,037
Smithfield	1,865
Spanish Fork	3,464
Spring City	1,100
Springville	3,356
Sugarhouse	1,500
Tooele	2,753
Wellsville	1,195
Woods Cross	1,000

VERMONT

Barre	10,734
Barton	1,330
Bellows Falls	4,883
Bennington	6,211
Bethel	1,500
Brandon	1,608
Brattleboro	6,517
Bristol	1,180
Burlington	20,468
Castleton	1,000
Charlotte	1,000
East Fairfield	1,000
Enosburg Falls	1,153
Essex Jc	1,245
Fairhaven	2,554
Hardwick	2,094
Island Pond	1,573
Jericho	1,000
Ludlow	1,621
Lyndonville	1,573
Middlebury	1,866
MONTPELIER	7,856
Morrisville	1,445
Newport	2,548
Northfield	1,918
Norwich	1,000
Orleans	1,131
Pittsford	1,200
Poultney	1,474
Proctor	2,756
Randolph	1,787
Richford	1,948

VERMONT Cont'd.	
Rochester	1,000
Rutland	13,546
St. Albans	6,381
St. Johnsbury	6,693
Saxtons River	1,000
Shelburne	1,000
Sheldon	1,000
South Royalton	1,100
South Shaftsbury	1,500
Springfield	3,250
Swanton	1,236
Vergennes	1,483
Wallingford	1,100
Waterbury	1,377
West Derby	1,109
West Rutland	2,000
White River Jc	2,500
Windsor	1,906
Winooski	4,520
Woodstock	1,383

VIRGINIA

Abingdon	1,757
Alexandria	15,329
Alfredton	1,000
Appalachia	1,090
Arlington	1,000
Ashland	1,324
Barton Hgts	1,388
Basic City	1,632
Bedford City	2,508
Berkley	5,700
Bigstone Gap	2,590
Blackstone	1,486
Bristol	6,247
Buenavista	3,245
Cape Charles	1,948
Charlottesville	6,765
Chase City	1,662
Chatham	1,113
Chincoteague Is.	1,419
Christiansburg	1,568
Churchland	1,000
Clifton Forge	5,748
Covington	4,234
Crewe	1,802
Culpeper	1,795
Damascus	1,299
Danville	19,020
Dendron	1,653
East Falls Church	1,000
East Radford	2,100
Emporia	2,018
Ettricks	1,200
Falls Church	1,128
Farmville	2,971
Fort Myer	1,000
Fortress Monroe	1,804
Franklin	2,271
Fredericksburg	5,874
Fries	1,775
Front Royal	1,133
Graham	1,917
Hampton	5,505
Harrisonburg	4,879
Highland Park	1,817
Hot Springs	1,000
Irvington	1,000
Lamberts Point	3,000
Lawrenceville	1,733
Leesburg	1,597
Lexington	2,931
Lowmoor	1,000
Luray	1,218
Lynchburg	29,494
Manassas	1,217
Marion	2,727
Martinsville	3,368
National Soldiers Home	3,800

VIRGINIA Cont'd.	
Newport News	20,205
Norfolk	67,452
Norton	1,866
Onancock	1,001
Petersburg	24,127
Phoebus	2,394
Pinners	1,500
Pocahontas	2,452
Port Norfolk	1,200
Portsmouth	33,190
Pulaski	4,807
Radford	4,202
RICHMOND	127,628
Roanoke	34,874
Rural Retreat	1,000
Salem	3,849
Saltville	1,628
Shenandoah	1,431
Smithfield	1,278
South Boston	3,516
South Norfolk	3,100
Staunton	10,604
Suffolk	7,008
Tangier	1,400
Tazewell	1,230
Toano	1,200
University	1,000
Vinton	1,928
Warrenton	1,427
Waverly	1,064
Waynesboro	1,389
West Norfolk	1,200
Westpoint	1,397
Williamsburg	2,714
Winchester	5,864
Woodstock	1,314
Wytheville	3,054

WASHINGTON

Aberdeen	13,660
Anacortes	4,168
Arlington	1,476
Bellingham	24,298
Blaine	2,289
Bremerton	2,993
Buckley	1,272
Burlington	1,302
Camas	1,125
Centralia	7,311
Charleston	1,062
Chehalis	4,507
Cheney	1,207
Clarkston	1,257
Cle Elum	2,749
Colfax	2,783
Colville	1,512
Cosmopolis	1,132
Davenport	1,229
Dayton	2,389
Edmonds	1,114
Ellensburg	4,209
Elma	1,532
Everett	24,814
Fern Hill	1,000
Fort Steilacoom	1,100
Goldendale	1,203
Hillyard	3,276
Hoquiam	8,171
Kelso	2,039
Kennewick	1,219
Kent	1,908
Leavenworth	1,951
Lynden	1,148
Marysville	1,239
Medical Lake	1,730
Monroe	1,552
Montesano	2,488
Mount Vernon	2,381
Newport	1,199
North Yakima	14,082
OLYMPIA	6,996
Palouse	1,549
Pasco	2,083
Pomeroy	1,605
Port Angeles	2,286
Port Blakeley	1,050
Port Townsend	4,181
Prosser	1,298
Pullman	2,602
Puyallup	4,544
Raymond	2,450
Renton	2,740
Ritzville	1,859
Roslyn	3,126
Seattle	237,194
Sedro Woolley	2,129
Shelton	1,163
Snohomish	3,244
South Bend	3,023
Spokane	104,402
Sprague	1,110
Sunnyside	1,379
Tacoma	83,743
Tekoa	1,694
Tenino	1,038
Toppenish	1,598
Vancouver	9,300
Waitsburg	1,237
Walla Walla	19,364
Wenatchee	4,050
Winlock	1,140

WEST VIRGINIA

Adamston	1,200
Alderson	1,252
Amos	1,600
Ansted	1,030
Avis	1,432
Beckley	2,161
Belington	1,481
Benwood	4,976
Blaine	1,200
Bluefield	11,188
Boomer	1,000
Bramwell	1,458
Buckhannon	2,225
Cameron	1,660
Central City	2,800
Ceredo	1,215
CHARLESTON	22,996
Charlestown	2,662
Chester	3,184
Clarksburg	9,201
Coketon	2,000
Davis	2,615
Eagle	1,500
Eckman	1,000
Edgewood	1,455
Elkhorn	2,100
Elkins	5,260
Elm Grove	1,899
Fairmont	9,711
Follansbee	2,031
Freeman	1,000
Fulton	1,038
Gary	1,200
Gassaway	1,086
Giatto	1,000
Grafton	7,563
Guyandotte	1,702
Hambleton	1,300
Hinton	3,656
Holden	2,000
Horton	1,000
Huntington	31,161
Keyser	3,705
Keystone	2,047
Kimball	1,630
Logan	1,640
McDowell	1,500
McMechen	2,921
Macdonald	1,153
Mammoth	1,000
Mannington	2,672
Marlinton	1,045
Martinsburg	10,698
Maybeury	2,000
Monongah	2,084
Montgomery	1,888
Morgantown	9,150
Moundsville	8,918
New Cumberland	1,807
New Martinsville	2,176
Parkersburg	17,842
Parsons	1,780
Philippi	1,038
Piedmont	2,054
Point Pleasant	2,045
Princeton	3,027
Ravenswood	1,081
Red Jacket	1,200
Richwood	3,061
Romney	1,112
Ronceverte	2,157
St. Albans	1,209
St. Marys	1,358
Salem	2,169
Scarbro	1,533
Shepherdstown	1,070
Shinnston	1,224
Sistersville	2,684
Spencer	1,224
Sutton	1,121
Terra Alta	1,126
Thomas	2,354
War Eagle	1,500
Welch	1,526
Wellsburg	4,189
West Grafton	1,500
Weston	2,213
Wheeling	41,641
Williamson	3,561
Williamstown	1,139
Winifrede	2,000
Winona	3,000

WISCONSIN

Algoma	2,082
Alma	1,011
Antigo	7,196
Appleton	16,773
Arborvitae	1,200
Arcadia	1,212
Ashland	11,594
Augusta	1,405
Baraboo	6,324
Barron	1,449
Bayfield	1,800
Beaverdam	6,758
Beloit	15,125
Berlin	4,636
Black River Falls	1,917
Bloomer	1,204
Boscobel	1,525
Brodhead	1,517
Burlington	3,212
Cedarburg	1,777
Chilton	1,530
Chippewa Falls	8,893
Clintonville	1,747
Columbus	2,523
Crandon	1,833
Cudahy	3,691
Cumberland	1,445
Darlington	1,808
Delavan	2,450
Depere	4,477
Dodgeville	1,791
Durand	1,503
Eagle River	1,700
Eau Claire	18,310
Edgerton	2,513
Elkhorn	1,707
Ellsworth	1,005
Elroy	1,729
Evansville	2,061
Fennimore	1,159
Florence	2,000
Fond du Lac	18,797
Fort Atkinson	3,877
Fountain City	1,031
Grand Rapids	6,521
Greenbay	25,236
Hartford	2,982
Hayward	4,000
Highland	1,096
Horicon	1,881
Hudson	2,810
Hurley	2,600
Iron Belt	1,000
Iron River	2,500
Janesville	13,894
Jefferson	2,582
Juneau	1,003
Kaukauna	4,717
Kenosha	21,371
Kewaunee	1,839
Kiel	1,244
Kilbourn	1,170
La Crosse	30,417
Ladysmith	2,352
Lake Geneva	3,079
Lakemills	1,672
Lancaster	2,329
Little Chute	1,354
Lodi	1,044
MADISON	25,531
Manitowoc	13,027
Marinette	14,610
Marshfield	5,783
Mauston	1,701
Mayville	2,282
Medford	1,846
Mellen	1,833
Menasha	6,081
Menomonie	5,036
Merrill	8,689
Milwaukee	373,857
Mineral Point	2,925
Mondovi	1,325
Monroe	4,410
Montello	1,104
Mount Horeb	1,048
National Home	2,100
Necedah	1,054
Neenah	5,734
Neillsville	1,957
Nekoosa	1,570
New Lisbon	1,074
New London	3,383
New Richmond	1,988
Niagara	1,700
North Fond du Lac	1,960
North Milwaukee	1,860
Oconomowoc	3,054
Oconto	5,629
Oconto Falls	1,427
Odanah	2,100
Omro	1,285
Onalaska	1,146
Oneida	2,200
Oshkosh	33,062
Park Falls	1,972
Peshtigo	1,975
Phillips	1,948
Platteville	4,452
Plymouth	3,094
Portage	5,440
Port Washington	3,792
Prairie du Chien	3,149
Princeton	1,269
Racine	38,002
Reedsburg	1,521
Reedsburg	2,615
Rhinelander	5,637
Riblake	1,018
Rice Lake	3,968
Richland Center	2,652
Ripon	3,739
River Falls	1,991
St. Francis	1,500
Seymour	1,109
Shawano	2,923
Sheboygan	26,398
Sheboygan Falls	1,630
Shullsburg	1,063
South Milwaukee	6,092
Sparta	3,973
Spooner	1,453
Stanley	2,675
Stevens Point	8,692
Stoughton	4,761
Sturgeon Bay	4,262
Sun Prairie	1,119
Superior	40,384
Tomah	3,419
Tomahawk	2,907
Two Rivers	4,850
Viroqua	2,059
Washburn	3,830
Waterloo	1,220
Watertown	8,829
Waukesha	8,740
Waupaca	2,789
Waupun	3,362
Wausau	16,560
Wausaukee	2,100
Wauwatosa	3,346
West Allis	6,645
West Bend	2,462
West De Pere	2,100
West Milwaukee	1,458
Whitewater	3,224
Wittenberg	1,090

WYOMING

Buffalo	1,368
Casper	2,639
CHEYENNE	11,320
Cody	1,132
Dietz	1,200
Douglas	2,246
Evanston	2,583
Fort Russell	1,000
Green River	1,313
Hanna	2,000
Lander	1,812
Laramie	8,237
Rawlins	4,256
Rock Springs	5,778
Sheridan	8,408
Thermopolis	1,524

CITIES AND TOWNS OF THE DOMINION OF CANADA, 1911 CENSUS

The following list names in alphabetical order all incorporated places and approximately all cities and towns in the Dominion of Canada having two hundred or more inhabitants. The numerals at extreme right of column are the latest available census figures, or recent estimates. Capitals of Provinces are in capital letters.

ALBERTA		ALBERTA Cont'd.		BR. COL. Cont'd.		BR. COL. Cont'd.		MANITOBA Cont'd.	
Acme	181	Medicine Hat	5,573	Cobble Hill	250	Steveston	1,100	Pilot Mound	458
Airdrie	164	Millet	162	Comaplix	250	Stewart	800	Plumas	225
Alix	267	Monarch	200	Comox	300	Summerland	800	Plum Coulee	380
Athabasca Ldg.	177	Morinville	385	Corbin	400	Telegraph Creek	270	Portage la Prairie	5,885
Banff	500	Mountain View	89	Cranbrook	2,365	Trail	1,460	Rapid City	580
Bankhead	1,000	Mundare	152	Creston	250	Trout Lake City	350	Rathwell	200
Barnwell	200	Munson	200	Cumberland	1,237	Vancouver	100,333	Reston	606
Barons	75	Nanton	558	Duncans	500	Vernon	2,671	Rivers	650
Bassano	545	New Norway	61	Eholt	300	VICTORIA	31,620	Roblin	350
Bawlf	270	North Edmonton	404	Enderby	835	Wardner	250	Roland	500
Bellevue	200	North Red Deer	304	Erie	200	Wellington	350	Rosenfeld	200
Blackfalds	150	Okotoks	514	Esquimalt	4,001	Ymir	650	Russell	562
Blairmore	1,166	Olds	917	Extension Mines	250	MANITOBA		St. Boniface	7,478
Bowden	178	Penhold	94	Fairview	300	Alexander	300	St. Charles	200
Bow Island	326	Pincher	116	Ferguson	200	Altona	400	Ste. Anne des Chenes	300
Brooks	486	Pincher Creek	1,027	Fernie	1,287	Arden	200	St. Jean Baptiste	250
Bruederheim	132	Pincher Station	200	Fort Steele	276	Austin	250	St. Pierre	200
Burdette	200	Ponoka	641	Golden	932	Baldur	400	Selkirk	2,990
Calgary	43,665	Provost	329	Grand Forks	1,577	Beausejour	847	Shoal Lake	591
Camrose	1,586	Raymond	1,465	Greenwood	1,700	Belmont	300	Somerset	250
Canmore	450	Redcliffe	213	Hedley	300	Benito	200	Souris	1,854
Cardston	1,207	Red Deer	2,118	Hosmer	2,019	Binscarth	250	Stonewall	1,005
Carmangay	286	Ryley	110	Jedway	300	Birtle	456	Stony Mountain	200
Carstairs	270	St. Albert	614	Kamloops	3,772	Boissevain	918	Strathclair	200
Castor	1,659	Sedgewick	331	Kaslo	1,000	Brandon	13,833	Swan Lake	200
Cayley	126	Stafford	985	Kelowna	1,663	Carberry	878	Swan River	517
Champion	200	Stavely	245	Kincolith	250	Carman	1,266	Transcona	300
Chaton	55	Stettler	1,444	Kingcome Inlet	200	Cartwright	300	Treherne	600
Claresholm	809	Stirling	514	Kit-A-Maat	250	Crystal City	500	Tyndall	200
Cochrane	395	Stony Plain	505	Kitchener	200	Cypress River	400	Virden	1,550
Coleman	1,557	Strathcona	5,579	Kyuquot	400	Dauphin	2,815	Waskada	200
Cowley	142	Strathmore	531	Ladner	800	Deloraine	808	Wawanesa	350
Crossfield	307	Strome	192	Ladysmith	3,295	Dominion City	225	Winkler	458
Daysland	349	Taber	2,321	Langley	200	Dunrea	200	WINNIPEG	135,430
Diamond City	506	Tofield	586	Langley Prairie	300	Elgin	350	Winnipeg Beach	264
Didsbury	726	Vegreville	1,029	Lulu Island	300	Elkhorn	574	Winnipegosis	300
EDMONTON	24,855	Vermilion	625	Lytton	200	Elm Creek	250	NEW BRUNSWICK	
Edson	250	Viking	153	Marysville	300	Emerson	1,043	Albert	350
Entwistle	140	Wainwright	788	Merritt	1,500	Garson	200	Albert Mines	200
Erskine	131	Walsh	200	Michel	1,515	Gilbert Plains	542	Alma	250
Exshaw	375	Warner	321	Midway	200	Gimli	496	Andover	289
Ferintosh	85	West Edmonton	181	Mission City	500	Gladstone	782	Apohaqui	300
Ft. Saskatchewan	785	Wetaskiwin	2,411	Mosquito Harbor	300	Glenboro	550	Armstrongs Brook	250
Frank	806	BR. COLUMBIA		Moyie	500	Grandview	637	Aroostook Jc	500
Gadsby	213	Abbotsford	300	Nakusp	347	Gretna	519	Back Bay	200
Gleichen	583	Agassiz	300	Nanaimo	8,305	Griswold	300	Baie Verte	300
Granum	250	Ahousaht	275	Nelson	4,563	Hamiota	565	Baillie	600
Grassy Lake	300	Ainsworth	300	New Denver	250	Hartney	623	Balmoral	600
Grouard	450	Alberni	891	New Michel	662	Holland	480	Barachois	300
Hardieville	300	Alert Bay	210	New Westminster	13,394	Inkster	200	Barnaby River	200
Hardisty	351	Anaconda	300	Northfield	200	Killarney	1,010	Barnesville	300
High River	1,173	Armstrong	810	No. Vancouver	7,781	La Riviere	200	Bass River	300
Holden	111	Arrowhead	500	Peachland	300	Lauder	200	Bathurst	960
Innisfail	601	Ashcroft	500	Penticton	750	Letellier	225	Bay du Vin	300
Innisfree	80	Atlin	300	Phoenix	1,512	McGregor	450	Beaver Harbor	270
Irvine	372	Barkerville	300	Point Grey	4,319	Manitou	639	Belledune	400
Islay	90	Barnet	300	Port Essington	350	Melita	690	Belledune River	200
Killam	197	Beaconsfield	300	Port Hammond	250	Miami	350	Benton	200
Kimball	250	Beaver Lake	300	Port Haney	200	Miniota	300	Berrys Mills	500
Lacombe	1,029	Bellabella	250	Prince Rupert	4,184	Minnedosa	1,483	Berwick	200
Lamont	192	Blaine	200	Princeton	400	Morden	1,130	Black River	300
Langdon	159	Brechin	200	Quatsino	200	Morris	598	Blacks Harbor	300
Lavoy	127	Camborne	250	Quatsino Sound	200	Napinka	326	Blackville	450
Leduc	526	Canoe Pass	200	Revelstoke	3,010	Neepawa	1,863	Blissfield	250
Lethbridge	8,050	Central Park	400	Rossland	2,827	Newdale	200	Blissville	300
Lignite	300	Chemainus	500	Salmon Arm	400	Ninga	300	Bloomfield	400
Lille	303	Chilliwack	1,657	Sandon	500	Norwood Grove	5,000	Bloomfield, Kings	200
Lloydminster	222	Clayoquot Sound	650	Sechelt	350	Oak Lake	449		
Macleod	1,837	Clo-oose	200	Slocan	189	Oak River	200		
Magrath	995	Cloverdale	200	So. Vancouver	16,024	Pierson	200		
Mannville	169								

N. B. Cont'd.	
Boiestown	250
Bonney River	200
Botsford Portage	250
Bristol	300
Buctouche	500
Butternut Ridge	500
Calhoun	200
Cambridge	200
Campbellton	3,816
Campo Bello	1,400
Cape Bald	300
Caraquet	2,800
Centreville	1,000
Chatham	4,662
Chipman	350
Clair	200
Clifton	200
Coates Mill	200
Cocagne	900
Coldstream	300
Coles Island	300
Collina	350
Cormierville	500
Corn Hill	300
Coverdale	250
Dalhousie	1,650
Dawson Settlem't	250
Debec Junction	200
Deer Island	1,500
Derby	200
De Wolfe Corner	200
Doaktown	400
Dorchester	1,050
Douglas	200
Douglass Harbor	200
Douglastown	500
Dupuis Corner	400
East Florenceville	200
Edmundston	1,821
Eel River Crossing	400
Elgin	250
Fairville	2,000
Florenceville	350
Foxcreek	500
Fredericton	7,208
Fredericton Junction	750
Gagetown	233
Gardner's Creek	200
Gibson	1,500
Glassville	200
Grand Auce	700
Grand Falls	1,539
Grand Manan	3,000
Great Shemogue	300
Green River Sta	200
Hammond Vale	200
Hampstead	250
Hampton	554
Harcourt	400
Hartland	1,000
Harvey	1,800
Harvey Station	200
Hawkshaw	300
Head of Millstream	600
Hillsborough	1,000
Hopewell Cape	300
Hopewell Hill	200
Irishtown	200
Jolicure	250
Kingston	500
Kirkland	200
Kouchibouguac	600
Lameque	375
Lepreau	300
L'Etete	200
Lewisville	350
Little Shippegan	250
Loggieville	800
Lower Caraquet	1,500

N. B. Cont'd.	
Lower Newcastle	250
Lower Prince William	400
Lower Southampton	200
Lower Woodstock	250
McAdam Junction	1,000
McDougall's Settlement	300
McLeod's Mills	250
Markhamville	300
Marysville	1,837
Mascarene	300
Mechanic's Settlement	250
Melrose	200
Memramcook	300
Middle Southampton	600
Milford	600
Millerton	400
Millidgeville	300
Millstream	400
Milltown	1,804
Millville	300
Miscou Harbour	250
Moncton	11,333
Moore's Mills	300
Mt. Carmel	200
Musquash	250
Nashwaaksis	225
Nelson	200
Newcastle	2,945
New Denmark	500
New Jerusalem	250
New Mills	200
North Esk	500
Norton	220
Notre Dame	400
Oak Bay	750
Oak Point	200
Oromocto	250
Pelletiers Mills	200
Pennfield Centre	1,000
Penobsquis	300
Perth	200
Petersville Church	200
Petitcodiac	750
Petit Rocher	250
Point de Bute	250
Port Elgin	800
Prince William	200
Randolph	300
Red Rapids	200
Renous River	200
Rexton	600
Richibucto	612
Richibucto Village	300
Richmond Corner	275
Riordon	700
River Charlo	350
Riverside	250
Robichaud	360
Rolling Dam	500
Rothesay	300
Round Hill	300
Rusagornis	200
Sackville	1,380
St. Andrews	987
St. Anthony	200
St. Basil	1,600
Sainte Croix	300
St. George	1,629
St. Jacques	200
St. John	42,499
St. Joseph	400
St. Josephs	200
St. Leonard's	276
St. Louis	400

N. B. Cont'd.	
St. Martins	3,000
St. Paul	600
St. Stephen	2,836
Salisbury	300
Scoudouc	200
Second Falls	500
Shediac	1,442
Sheffield	350
Shippegan	500
Southampton	300
Springfield, Kings	300
Springfield, York	300
Springhill	250
Stonehaven	300
Sussex	1,906
Sussex Corner	300
Tabusintac	600
Tracadie	2,600
Tracey Station	250
Upham	200
Upper Dorchester	250
Upper Gagetown	200
Upper Sackville	250
Village St. Jean	250
Waterford	1,450
Welsford	200
West Branch St. Nicholas River	500
Westfield Beach	200
White's Cove	200
Wickham	250
Windsor	200
Woodstock	3,856
Young's Cove	300

NOVA SCOTIA

Acaciaville	200
Advocate Harbor	850
Amherst	8,973
Annapolis Royal	1,019
Antigonish	1,787
Apple River	400
Arcadia	300
Arichat	800
Arisaig	200
Aspen	400
Atwood's Brook	200
Auburn	200
Avonport	220
Aylesford	350
Baccaro	250
Baddeck	1,650
Bailey's Brook	250
Baker Settlement	200
Balmoral Mills	250
Barney's River	400
Barney's River Station	200
Barrington	700
Barrington Passage	500
Barss' Corners	400
Barton	300
Bass River	300
Baxters Harbor	200
Bayfield	250
Bay St. Lawrence	400
Bear Point	200
Bear River	1,475
Beauly	300
Bedford	700
Belle Cote	250
Belle Marche	200
Belleville	300
Belliveau Cove	300
Belmont	300
Benacadie	500
Berwick	1,000
Big Bras d'or	200
Big Tracadie	250
Bill Town	200
Blandford	300

N. S. Cont'd.	
Blockhouse	200
Blue Mountain	350
Blue Rock	250
Boylston	300
Bridgeport	1,200
Bridgetown	996
Bridgeville	200
Bridgewater	1,800
Brighton	500
Broad Cove Chapel	300
Broad Cove Marsh	200
Brookfield	300
Brooklyn	300
Brook Village	250
Brookville	300
Brule	400
Burnside	250
Caledonia	300
Caledonia, Queens	500
Cannes	200
Canning	800
Canso	1,617
Cape Augnet	300
Cape Negro	250
Cape North	350
Cape Sable Island	200
Catalone	200
Central New Annan	300
Centre Burlington	350
Centreville	500
Charlo's Cove	200
Chaswood	200
Chelsea	300
Chester	900
Chester Basin	300
Cheverie	200
Chignecto	200
Christmas Island	600
Church Point	200
Clarke's Harbor	1,000
Clementsport	300
Clementsvale	250
Cleveland	200
Clyde River	300
Collingwood Corner	400
Comeauville	500
Conn's Mills	200
Conquerall Banks	325
Cross Roads Country Harbor	250
Dalhousie East	250
Dalhousie West	250
Dartmouth	5,058
Deep Brook	400
Denmark	200
Denver	200
Descouse	300
Digby	1,246
Diligent River	300
Doctor's Cove	200
Dominion	2,589
Dominion No. 6	200
Dunvegan	200
Earltown	300
East Bay	250
E. Chezzetcook	600
Eastern Harbor	1,000
Eastern Passage	250
E. Port Medway	200
E. Pubnico	600
E. River	200
Eatonville	250
Economy	350
Ecum Secum	250
Eel Brook	200
Elmsdale	400
Enfield	250

N. S. Cont'd.	
English Town	200
Fairview Station	250
Falmouth Station	200
First South	250
Five Islands	625
Five Mile River	200
Fourchu	220
Fox River	300
Frankville	200
Freeport	1,400
French Village	832
Friar's Head	300
Gabarouse	1,750
Gabarouse Lake	200
Gay's River	350
Georgeville	200
Gilbert Cove	225
Gillie's Point	200
Glace Bay	16,561
Glencoe	650
Glenholme	400
Goldboro	500
Grand Desert	530
Grand Etang	400
Grand Mira So	300
Grand Narrows	250
Grand Pre	250
Granville Centre	300
Granville Ferry	320
Great Village	2,000
Greenfield	200
Green Harbor	300
Green Hill	200
Grosses Coques	500
Guysborough	1,000
Guysborough Intervale	300
Halifax	46,601
Hammond's Plains	300
Hantsport	686
Harmony Mills	200
Havre Boucher	700
Hay's River	200
Hazel Hill	450
Head of Jordan River	600
Head of St. Margaret's Bay	300
Heatherton	200
Hebron	500
Herring Cove	325
Hopewell	300
Hortonville	425
Hubbards	450
Ingonish	400
Inverness	2,719
Irish Cove	300
Iron Mines	200
Isaac's Harbor	500
Jeddore Oyster Ponds	300
Joggin Mines	500
Jordan Branch	250
Judique	300
Kemptville	200
Kennetcook Corner	250
Kentville	2,304
Kingsbury	225
Kinsman's Corners	300
La Have	200
La Have Island	200
Lake Ainslie	250
Lake Vale	350
L'Ardoise	750
Larry's River	600
Lawrencetown	280
Leitches Creek	300
Lingan	300
Linwood	200
Liscomb	500

N. S. Cont'd.		N. S. Cont'd.		N. S. Cont'd.		N. S. Cont'd.		ONTARIO Cont'd.	
Little Bras d'or	200	Morristown	200	Rose Bay	250	Wentzells Lake	200	Belwood	246
Little Bras d'or (South Side)	200	Moser's River	250	Round Hill	200	West Bay	200	Berkeley	200
Little Brook	400	Mount Hanly	200	Sable River	200	Westchester	200	Berlin	15,192
Little Dover	300	Mulgrave	700	St. Bernard	200	West New Annan	300	Berwick	200
Little Lorraine	300	Musquodoboit Harbor	1,150	St. Peter's	1,000	West Newdy Quoddy	250	Bethany	450
Little Narrows	300	Necum Teuch	400	Salmon River	250	Westport	600	Billings Bridge	300
Little River	350	Neils Harbor	300	Salt Springs	400	West Pubnico	1,150	Biscotasing	500
Little River Cheticamp	500	New Aberdeen	600	Sambro	400	West River	200	Blackburn	200
Little River Musquodoboit	550	New Albany	200	Sandford	400	West River Station	200	Blair	200
Liverpool	2,109	New Germany	1,500	Sandy Cove	400	Westville	4,417	Blenheim	1,386
Lochaber	200	New Glasgow	6,383	Sandy Point	500	Weymouth	600	Blind River	2,558
Loch Lomond	250	New Harbor	250	Saulnierville	400	Weymouth North	500	Bloomfield	610
Lockeport	784	Newport	400	Scotch Village	200	White Rock Mills	200	Bloomsburg	200
Loganville	250	New Waterford	3,000	Scotts Bay	250	Whycocomagh	400	Bluevale	300
Londonderry	1,500	Nictaux Falls	800	Seabright	300	Wilmot	200	Blyth	805
Londonderry Station	200	Nine Mile River	300	Selmah	250	Windsor	3,452	Bobcaygeon	1,002
Long Point	250	Noel	300	Sheet Harbor	375	Windsor Jc.	200	Bolton	707
Louisburg	1,006	No. Brookfield	200	Shelburne	1,435	Wine Harbor	200	Bondhead	450
Louisdale	200	No. E. Harbor	250	Sherbrooke	500	Wolfville	1,458	Bonfield	484
Lower Argyle	825	Northfield	250	Shinimecas Bridge	250	Yarmouth	6,600	Bookton	200
Lower Barney's River	200	No. River	300	Shubenacadie	1,475			Boston	250
Lower E. Pubnico	300	No. Salem	200	Shunacadie	200			Bothwell	690
Lower Economy	200	No. Sydney	5,418	Sluice Point	250	ONTARIO		Bourget	500
Lower l'Ardoise	750	Osborne	200	Somerset	240			Bowmanville	2,811
Lower Onslow	650	Owl's Head Harbor	200	Sonora	300	Acton	1,720	Bracebridge	2,776
Lower Sackville	500	Oxford	1,449	South Alton	300	Admaston	2,300	Bradford	946
Lower Sandy Point	250	Paradise	350	Southampton	225	Againcourt	200	Braeside	600
Lower Selmah	200	Parrsboro	2,700	So. Farmington	250	Ahmic Harbour	200	Brampton	3,412
Lower Ship Harbor	250	Petite de Grat Bridge	350	So. Maitland	300	Ailsa Craig	568	Brantford	23,095
Lower Stewiacke	600	Petite Riviere Bridge	600	So. Ohio	300	Alexandria	2,318	Brechin	300
Lower West Pubnico	250	Pictou	3,179	Springhaven	200	Alfred	800	Breslau	200
Lower Wood Harbor	600	Pleasant Bay	275	Spring Hill	5,713	Allenford	300	Bridgeburg	1,775
Lunenburg	2,681	Pleasant Harbor	200	Springville	350	Alliston	1,279	Bridgenorth	200
Lyons Brook	200	Pleasant River	250	Spry Bay	290	Alma	200	Bridgeport	300
McKinnon's Harbor	300	Pleasant Valley	430	Stellarton	1,614	Almonte	2,452	Brigden	600
Mabou	600	Point Cross	200	Stewartdale	350	Alton	600	Bright	450
Maccan	250	Portapique	200	Stewiack	474	Alvinston	806	Brighton	1,318
Mahone Bay	800	Port Dufferin	600	Summerville	300	Ameliasburg	250	Britannia Bay	250
Main-a-Dieu	300	Port Felix	200	Sunnybrae	200	Amherstburg	2,556	Brockville	9,372
Maitland	300	Port George	200	Sydney	17,714	Amigari	200	Bronte	300
Maitland, Hants	600	Port Greville	450	Sydney Mines	6,600	Ancaster	300	Brooklin	500
Maplewood	200	Port Hastings	600	Sydney River	200	Angus	250	Brougham	250
Marble Mountain	300	Port Hawkesbury	684	Tancook Island	700	Appin	200	Brownsville	300
Margaree Harbor	500	Port Hillford	500	Tangier	900	Apple Hill	300	Brucefield	200
Margaretsville	300	Port Hood	1,078	Tatamagouche	500	Appleton	250	Bruce Mines	685
Marie Joseph	500	Port Joli	200	The Falls	300	Arden	800	Brussels	902
Marion Bridge	250	Port La Tour	200	Thompson's Station	250	Arkona	426	Burford	750
Marriott's Cove	250	Port Lorne	300	Thorburn	500	Arnprior	4,395	Burgessville	300
Martin's River	200	Port Maitland	975	Tidnish	300	Arthur	1,098	Burk's Falls	973
Mass Town	250	Port Malcolm	350	Tivertcn	250	Ashton	250	Burlington	1,831
Mavillette	200	Port Medway	600	Tomkinsville	200	Athens	800	Burritt's Rapids	250
Meagher's Grant	250	Port Morien	2,000	Toney Mills	200	Atwood	500	Bush Glen	200
Melvern Square	400	Portuguese Cove	600	Torbay	300	Aultsville	1,800	Byng	200
Merigomish	400	Port Wade	200	Torbrook	300	Aurora	1,901	Byng Inlet	800
Meteghan	2,400	Port Williams	550	Torbrook Mines	200	Avening	200	Byron	200
Meteghan River	400	Poulamond	200	Trenton	500	Avonmore	400	Cache Bay	886
Meteghan Station	250	Princeport	200	Truro	6,107	Aylmer	2,099	Cainsville	300
Middle Lahave Ferry	300	Prospect	700	Tusket	450	Ayr	823	Caintown	200
Middle Musquodoboit	1,000	Pubnico Head	911	Two Rivers	200	Ayton	450	Calabogie	400
Middleton	827	Pugwash	700	Upper Kennetcook	200	Baden	800	Caledon East	400
Milford Station	500	Quinan	300	Upper Middleboro	200	Bailieboro	200	Caledonia	952
Mill Cove	200	Rawdon	250	Upper Musquodoboit	1,500	Ballinafad	200	Callender	700
Millsville	200	Reserve Mines	1,200	Upper New Harbor	200	Baltimore	250	Camden East	600
Mill Village	721	River Bourgeois	950	Upper Newport	200	Bancroft	620	Camlachie	225
Milton	1,100	River Dennis	300	Upper Port La Tour	300	Barrie	6,428	Campbellford	3,051
Minudie	600	River Dennis Centre	300	Upper Rawdon	350	Barriefield	500	Campbellville	200
Mira Ferry	350	Riverside Corner	200	Upper Stewiacke	250	Bartonville	300	Canifton	300
Mira Gut	350	Rockingham Station	200	Victoria Beach	300	Bath	347	Cannamore	200
Mochelle	200	Rocklin	200	Victoria Mines	350	Battersea	300	Cannington	934
Moose River Gold Mines	400	Rockville	200	Wentworth Station	700	Bayfield	499	Cape Croker	500
						Baysville	200	Cardinal	1,111
						Beachburg	250	Cargill	500
						Beachville	500	Carleton Place	3,620
						Beamsville	1,094	Carlisle	200
						Bearbrook	200	Carp	200
						Beaverton	1,015	Casselman	956
						Beeton	564	Castleton	450
						Belgrave	200	Cataraqui	300
						Belle River	520	Cavanville	200
						Belleville	9,850	Cayuga	736
						Belmont	600	Cedar Dale	400
						Belmore	200	Cedar Grove	250

ONTARIO Cont'd.		ONTARIO Cont'd.		ONTARIO Cont'd.		ONTARIO Cont'd.		ONTARIO Cont'd.	
Centralia	250	Douglas	500	Glen Robertson	250	King City	500	Millbank	400
Centreville	300	Drayton	706	Glen Williams	400	Kingston	18,815	Millbridge	200
Chantry	400	Dresden	1,551	Goderich	4,522	Kingston Mills	200	Mill Brook	793
Chapleau	1,500	Drumbo	500	Goodwood	300	Kingsville	1,427	Mille Roches	600
Charlton	250	Dryden	715	Gore Bay	1,703	Kinmount	650	Milton	1,657
Chatham	10,760	Duart	200	Gorrie	550	Kirkfield	300	Milverton	826
Chatsworth	357	Dublin	350	Gowganda	400	Kleinburg	350	Mimico	1,407
Cheapside	200	Dunchurch	300	Grafton	400	Komoka	250	Minden	250
Chelmsford	550	Dundalk	689	Grand Valley	775	Lakefield	1,397	Mitchell	1,766
Cheltenham	250	Dundas	4,297	Grand View	1,000	Lakeport	200	Mond	200
Chepstowe	200	Dundela	200	Granton	400	Lambeth	350	Monkton	350
Cherry Valley	200	Dungannon	300	Gravenhurst	1,621	Lambton Mills	500	Moorefield	300
Chesley	1,736	Dunnville	2,854	Greenwood	200	Lanark	737	Mooretown	250
Chesterville	883	Dunvegan	250	Grimsby	1,669	Lancaster	618	Moose Creek	400
Chippawa	707	Durham	1,579	Guelph	15,153	Langton	200	Morewood	350
Christian Island	250	Dutton	836	Haddo	200	Lansdowne	400	Morpeth	300
Chute a Blondeau	400	Earlscourt	400	Hagersville	1,106	Larder Lake	200	Morrisburg	1,696
Clandeboye	200	Easton's Corner	200	Haileybury	3,874	Latchford	428	Morriston	300
Claremont	500	E. Toronto	3,500	Haliburton	482	Leamington	2,652	Morton	250
Clarence Creek	200	Echo Place	350	Hamilton	81,881	Lefaivre	200	Moulinette	300
Clarksburg	700	Eganville	1,188	Hampton	300	Lefroy	200	Mount Albert	500
Clarkstown	300	Egmondville	800	Hanover	2,342	Lindsay	6,956	Mount Brydes	400
Clifford	595	Elginburg	200	Harboard	200	Linwood	450	Mount Forest	1,837
Clinton	2,251	Elk Lake	1,000	Harrisburg	300	Lion's Head	500	Mount Hope	200
Cobalt	5,630	Elmira	1,786	Harriston	1,491	Lisle	200	Mount Pleasant, (Brant)	450
Cobden	762	Elmvale	900	Harrow	500	Listowel	2,289	Mount Pleasant	200
Coboconk	600	Elmwood	600	Harrowsmith	400	Little Britain	275	Nairn Centre	200
Cobourg	5,073	Elora	1,197	Harwood	300	Little Current	1,208	Nanticoke	200
Cochrane	1,714	Embro	477	Hastings	883	Lombardy	250	Napanee	2,807
Cockburn Island	275	Embrun	450	Havelock	1,433	Londesborough	250	Napier	250
Colborne	999	Emo	200	Hawkesbury	4,391	London	46,177	Navan	300
Coldwater	651	Emsdale	250	Hawkestone	350	London Junction	300	Neustadt	466
Colebrook	200	Englehart	670	Hawkesville	250	Longford Mills	300	Newboro	469
Collingwood	7,077	Enterprise	500	Hawthorne	200	L'Orignal	1,351	Newburgh	465
Collin's Bay	200	Erin	511	Head Lake	700	Loring	500	Newbury	377
Comber	600	Erindale	250	Helen Mine	300	Lotus	200	Newcastle	655
Conestogo	400	Essex	1,353	Hensall	792	Lucan	709	New Dundee	300
Connaught	500	Ethel	250	Hepworth	309	Lucknow	967	New Hamburg	1,484
Consecon	600	Everett	200	Hespeler	2,368	Lunenburg	200	Newington	300
Conway	1,500	Everton	200	Hickson	200	Lyn	500	New Liskeard	2,107
Cookstown	600	Excelsior	350	Highgate	500	Lynden	500	New Lowell	250
Cooksville	400	Exeter	1,554	Highland Creek	200	Lyndhurst	200	Newmarket	2,968
Copetown	200	Fairfield East	200	Hillsburgh	500	Lynedoch	200	Newton	200
Copleston	200	Falls View	200	Hillsdale	450	McGregor	250	Newton Brook	250
Copper Cliff	3,086	Farran's Point	400	Hilton	250	McMillan's Corners	300	New Toronto	300
Corbetton	200	Fenelon Falls	1,055	Holland Landing	505	Madoc	1,058	Niagara	1,318
Cordova Mines	550	Fergus	1,534	Holstein	300	Magnetawan	300	Niagara Falls	9,245
Cornwall	6,598	Finch	411	Hopefield	700	Maitland	200	Nilestown	200
Corunna	300	Fingal	400	Hornby	200	Mallorytown	400	Nobleton	200
Courtland	300	Fitzroy Harbor	250	Horning's Mills	350	Malton	300	Norham	250
Courtright	375	Flesherton	600	Humber Bay	350	Malvern	200	Norman	300
Credit Forks	200	Fletcher	200	Humberstone	400	Manchester	200	North Augusta	500
Crediton	750	Flinton	200	Huntley	350	Manilla	250	North Bay	7,715
Creemore	643	Floradale	250	Huntsville	2,358	Manitowaning	450	North Cobalt	200
Creighton Mine	300	Florence	400	Hyde Park Corner	300	Manotick	500	North Gower	300
Crysler	1,100	Fonthill	250	Ilderton	200	Maple	400	North Lancaster	250
Culloden	200	Fordwich	700	Ingersoll	4,757	Markdale	932	North Port	250
Cumberland	300	Forest	1,444	Inglewood	350	Markham	909	North Toronto	5,362
Cummings' Bridge	2,000	Forester's Falls	250	Inkerman	300	Marlbank	600	Norval	400
Cundles	200	Formosa	500	Innerkip	300	Marmora	865	Norwich	1,109
Curran	300	Fort Erie	1,147	Innisville	200	Martintown	375	Norwood	811
Cutler	400	Fort Frances	1,643	Inwood	350	Massey	864	Nottawa	300
Dashwood	600	Fort William	16,499	Iroquois	849	Matheson	400	Novar	200
Deer Park	900	Fournier	375	Islington	200	Mattawa	1,523	Oakland	200
Delaware	300	Foxboro	300	Jarvis	510	Maxville	759	Oakville	2,372
Delhi	825	Frankford	700	Jerseyville	250	Meadowvale	200	Oakwood	250
Delta	500	Frankville	250	Jordan Station	200	Meaford	2,811	Odessa	700
Demorestville	200	Freelton	250	Kakabeka Falls	200	Mechanicsville	800	Oil City	250
Denbigh	200	French River	300	Kearney	812	Melbourne	300	Oil Springs	646
Depot Harbor	657	Fullarton	200	Keene	400	Merlin	300	Omemee	505
Deseronto	2,018	Galt	10,299	Keewatin	1,242	Merrickville	991	Orangeville	2,340
Dickinson's Landing	300	Gananoque	3,764	Kelvin	250	Merritton	1,670	Orillia	6,535
Dixie	450	Garden Hill	250	Kemptville	1,192	Metcalfe	400	Orland	200
Dominionville	200	Garden Island	150	Kenmore	200	Micaville	200	Orleans	200
Donald	400	Garden River	1,500	Kenora	6,159	Micksburg	850	Orono	800
Doon	500	Garson Mine	300	Kerwood	250	Middlemiss	200	Orwell	300
Dorchester Station	500	Georgetown	1,574	Killaloe	200	Middleport	200	Osceola	200
Dorion	300	Glammis	225	Killaloe Station	450	Middleville	200	Oshawa	7,433
		Glenallan	300	Killarney	250	Midland	4,660	Osnabruck Centre	400
		Glencoe	841	Kinburn	200	Mildmay	1,000	OTTAWA	86,340
		Glen Morris	200	Kincardine	1,956	Milford	250	Otterville	750

ONTARIO Cont'd.	
Owen Sound	12,555
Oxford Mills	500
Paisley	830
Pakenham	600
Palmerston	1,665
Paris	4,095
Park Hill	1,289
Parry Sound	3,400
Pelee Island	650
Pembroke	5,624
Pendleton	200
Penetanguishene	3,568
Perth	3,578
Peterboro	18,312
Petrolia	3,518
Phelpston	200
Phillipsville	300
Pickering	900
Picton	3,561
Plainfield	250
Plantagenet	475
Plattsville	600
Plevna	200
Point Anne	200
Point Edward	874
Ponty Pool	350
Port Arthur	11,216
Port Burwell	700
Port Carling	382
Port Colborne	1,624
Port Credit	600
Port Dalhousie	1,170
Port Dover	1,138
Port Elgin	1,235
Port Elmsley	200
Port Hope	5,089
Port Lambton	350
Portland	300
Port Perry	1,145
Port Robinson	500
Port Rowan	721
Portsmouth	1,786
Port Stanley	896
Powassan	638
Prescott	2,801
Preston	3,883
Priceville	300
Prince Albert	300
Princeton	500
Quadville	250
Queensville	250
Rainham Centre	200
Rainy River	1,579
Rankin	200
Rednersville	200
Renfrew	3,846
Richards' Landing	300
Richmond	428
Richmond Hill	652
Ridgetown	1,905
Ridgeway	800
Ripley	650
Roblin	200
Rockland	3,397
Rockport	300
Rockton	200
Rockwood	600
Rodney	676
Rosemont	200
Rosseau	250
Rothsay	200
Routhier	300
Rowena	200
Russell	600
St. Amour	400
St. Andrews W., St. Anne de Prescott	200 1,500
St. Catharines	12,460
St. Clements	350
St. David's	200
St. Eugene	350

ONTARIO Cont'd.	
St. George	950
St. Isidore de Prescott	550
St. Jacob's	500
St. Marys	3,393
St. Onge	250
St. Paschal Baylon	300
St. Thomas	14,050
St. Williams	200
Salem	500
Saltford	200
Sand Point	350
Sandwich	2,302
Sarnia	9,936
Sault Ste. Marie	10,986
Scarboro Jc	200
Schomberg	300
Schreiber	600
Scotland	400
Seaforth	1,983
Sebringville	500
Seeley's Bay	200
Selby	225
Selkirk	400
Severn Bridge	300
Shakespeare	450
Shallow Lake	750
Shannonville	400
Sharbot Lake	450
Sharpton	200
Shedden	350
Sheffield	200
Shelburne	1,113
Sherkston	200
Simcoe	3,227
Singhampton	200
Slate River	300
Smithfield	200
Smiths Falls	6,361
Smithville	600
Sombra	400
Southampton	1,681
So. Gower	200
So. Indian	350
So. Mountain	400
So. River	593
So. Woodslee	300
Spanish Mills	200
Spanish Station	200
Sparta	400
Spencerville	400
Spragge	400
Springbrook	200
Springfield	454
Springford	350
Stamford	300
Staples	500
Stayner	1,039
Steelton	3,936
Stella	250
Stevensville	300
Stewart Town	900
Stirling	850
Stittville	200
Stoney Creek	500
Stoney Point	350
Stouffville	1,025
Straffordville	300
Stratford	12,929
Strathcona	350
Strathroy	2,821
Streetsville	543
Stroud	200
Sturgeon Bay	200
Sturgeon Falls	2,188
Sudbury	4,139
Summerstown	250
Summerstown Station	250
Sunderland	600

ONTARIO Cont'd.	
Sundridge	420
Sutton West	793
Swansea	200
Sydenham	600
Tagona	350
Tamworth	800
Tara	551
Tavistock	981
Tecumseh	250
Teeswater	853
Teeterville	300
Thamesford	400
Thamesville	809
Thedford	559
Thessalon	1,945
Thornbury	791
Thorndale	500
Thornhill	850
Thornton	200
Thorold	2,265
Tilbury, (Essex)	406
Tilbury, (Kent)	962
Tilsonburg	2,758
Tiverton	342
Todmorden	800
Toledo	450
Tomstown	200
TORONTO	376,240
Tottenham	507
Trenton	3,994
Trout Creek	400
Tweed	1,368
Tyrone	200
Udora	250
Uffington	350
Union	300
Unionville	500
Uxbridge	1,433
Vanessa	200
Vankleek Hill	1,577
Vars	400
Ventnor	200
Verner	500
Vernon	250
Verona	250
Victoria Harbor	1,800
Victoria Mines	600
Victoria Road	250
Vienna	332
Vittoria	525
Waldemar	200
Wales	400
Walkerton	2,601
Walkerville	3,302
Wallaceburg	3,438
Wallacetown	350
Walsingham Centre	400
Wardsville	240
Warkworth	800
Warren	500
Washago	300
Waterdown	756
Waterford	1,083
Waterloo	4,360
Watford	1,092
Waubaushene	1,000
Webbwood	657
Welland	5,311
Wellandport	250
Wellesley	700
Wellington	785
Wendover	250
Westboro	500
W. Flamboro	350
W. Lorne	740
Westmeath	250
Weston	1,875
Westport	803
W. Toronto	12,000
Wharncliffe	300
Wheatley	600
Whitby	2,247

ONTARIO Cont'd.	
Whitechurch	200
White River	500
Whitevale	250
Whitney	2,000
Wiarton	2,264
Wikwemikong	900
Wilkesport	200
Williamsburgh	300
Williamsford	300
Williamstown	600
Wilton	250
Winchester	1,143
Winchester Springs	400
Windham Centre	250
Windsor	17,819
Wingham	2,238
Winona	800
Wolfe Island	500
Wolverton	225
Woodbridge	607
Woodstock	9,321
Woodville	394
Wooler	300
Worthington	250
Wroxeter	366
Wychwood	700
Wyebridge	250
Wyoming	569
Yarker	500
York	400
Zephyr	200
Zurich	600
PRINCE EDWARD ISLAND	
Abrams Village	350
Alberton	700
Bedeque	300
Breadalbane	200
Caledonia	200
Cape Traverse	250
Cardigan	250
Carleton	200
Cavendish	200
CHARLOTTETOWN	11,198
Coleman	300
Crapaud	400
Flat River	250
Georgetown	1,010
Hunter River	250
Kensington	500
Kildare	450
Mill River	200
Montague	800
Montrose	200
Mount Stewart	300
Murray Harbor	200
No. Rustico	750
Orwell	250
Pinette	400
Rustico	400
St. Eleanors	400
St. Louis Station	200
Souris	1,000
Suffolk	200
Summerside	2,785
Tignish	450
Tryon	500
Tyne Valley	200
Valleyfield	200
Victoria	400
QUEBEC	
Abbotsford	1,000
Abenakis Springs	2,000
Abercorn	250
Acton Vale	1,402
Adamsville	375
Adderley	800
Adstock	500
Agnes	417
Ahuntsic	944

QUEBEC Cont'd.	
Amqui	1,070
Andreville	428
Ange Gardien	1,450
Ange Gardien de Rouville	390
Angeline	300
Angers	1,500
Anjou	200
Armagh	3,000
Arthabaska	1,000
Arundel	625
Asbestos	2,224
Ascot Corner	770
Athelstan	200
Auvergne	450
Avignon	1,000
Ayer's Cliff	316
Aylmer	3,206
Aylwin	200
Bagotville	1,011
Baillargeon	1,000
Barachois de Malbaie	1,000
Barnston	200
Bas du Sault	250
Batiscan	1,100
Beaconsfield	712
Beauce Junction	300
Beauceville	1,677
Beauceville E.	500
Beauharnois	2,005
Beaulac	431
Beaulieu	325
Beaumont	200
Beauport	5,775
Beaupré	200
Beaurivage	1,607
Becancour	311
Bedford	1,432
Beebe	808
Beebe Junction	200
Beech Ridge	250
Belisle's Mills	950
Belle Riviere	400
Belœil	1,506
Beranger	200
Bergerville	600
Bernierville	628
Bersimis	700
Berthier	1,335
Berthier Junction	225
Berthierville	1,350
Bic	2,500
Bienville	1,004
Blanche	200
Boileau	500
Bolton Centre	300
Bonaventure River	1,200
Bord a Plouffe	700
Boucherville	1,097
Bouchette	1,100
Bourg Louis	3,000
Breakeyville	4,000
Bridgeville	200
Brigham	300
Broadlands	200
Brome	548
Bromptonville	1,239
Brookdale	600
Brownsburgh	525
Bryson	477
Buckingham	3,854
Buckland	350
Bury	200
Cabano	250
Cacouna	517
Calumet	650
Calumet Island	1,500
Campbell's Bay	300
Canrobert	229
Cap a la Baleine	300

QUEBEC Cont'd.		QUEBEC Cont'd.		QUEBEC Cont'd.		QUEBEC Cont'd.		QUEBEC Cont'd.	
Cap Chatte	930	E. Farnham	400	Jonquiere	2,354	Magdalen Islands	3,700	Norton Creek	250
Cap des Rosier	700	Eastman	622	Kamouraska	519	Magog	3,999	Notre-Dame de Graces W.	5,217
Cape Cove	2,000	E. Templeton	500	Kelso	1,100	Maisonneuve	18,674	Notre Dame de Rimouski	400
Cape Despair	200	Eaton	250	Kiamika	700	Malbaie	1,449	Notre Dame des Bois	960
Capelton	600	Echo Vale	200	Kildare	1,800	Mal-Bay	275	Notre Dame de Stanbridge	768
Caplin River	475	Egypte	400	Kingsbury	263	Manche d'Epee	200	Notre Dame du Lac	1,250
Cap Magdeleine	375	Emileville	200	Kingsey Falls	300	Mandaville	400	Notre Dame du Laus	600
Cap-Rouge	500	Escuminac	400	Knowlton	885	Maniwaki	546	Notre Dame du Portage	700
Cap St. Ignace	2,650	Eustis	300	La Baie	2,200	Manseau	900	Nouvelle	2,000
Cap St. Martin	250	Fabre	200	Labelle	826	Mansonville	420	Noyan	460
Cap Sante	1,300	Farnham	3,560	Lacadie	1,500	Maple Grove	550	O'Donnells Siding	900
Capucins	200	Farnham Centre	250	Lac a la Tortue	350	Marbleton	681	Oka	584
Cariboo Islands	200	Farrelton	300	Lac au Saummon	1,171	Maria	4,000	Ormstown	782
Carillon	188	Father Point	250	Lac aux Sables	675	Maria Capes	600	Otter Lake	500
Carleton	1,500	Fermond	65	Lac Bellemarre	300	Maria E.	200	Outremont	4,745
Cartier	1,216	Fitch Bay	500	La Chapelle	200	Marieville	1,587	Papineauville	1,015
Cartierville	200	Fort Coulonge	811	Lachenaie	650	Marsboro	500	Paquetteville	1,000
Cascades Point	400	Foster	200	Lachine	10,778	Martinville	200	Paspebiac	1,500
Caughnawaga	2,000	Fox River	1,360	Lachute	2,407	Mascouche	2,250	Pentacost River	320
Causapscal	1,400	Frampton	400	Lacolle	1,000	Mascouche Rapids	200	Perce	2,300
Cedar Hall	1,500	Franklin Centre	350	La Conception	500	Masham Mills	400	Perkins	350
Cedars	350	Fraserville	6,733	La Conception Station	600	Maskinonge	775	Petit Bois	300
Chambly Basin	900	Frelighsburg	282	Lake Alymer	1,100	Massawippi	200	Petite Mascouche	200
Chambly Canton	857	Frost Village	225	Lake Beauport	250	Masson	1,034	Petite Matane	450
Champlain	1,680	Gagne	250	Lake Etchemin	1,500	Massueville	776	Petit Metis	285
Chantelle	300	Garthby	800	Lakefield	200	Mastai	200	Phillipsburg	347
Chapeau	277	Gascon	500	Lake Megantic	2,399	Matane	1,850	Piapolis	536
Charlemagne	776	Gaspe	606	Lake Weedon	607	Matapedia	350	Piedmont	600
Charlesbourg	2,000	Gaspe Bay So	400	Lambton	1,650	Mawcook	350	Pierreville	1,362
Chartierville	800	Gentilly	430	Landreville	200	Melbourne	314	Pigeon Hill	260
Chateauguay	600	Georgeville	250	Langevin	1,000	Melocheville	200	Pike River	220
Chateauguay Basin	400	Girard	250	L'Annonciation	622	Milton E.	200	Pincourt	300
Chateau Richer	1,350	Glen Murray	200	Lanoraie	600	Mingan	600	Piopolis	500
Chaudiere Station	200	Glen Sutton	400	L'Anse a Giles	300	Mirabel	350	Plaisance	300
Chelsea	200	Gould	250	L'Anse au Beaufils	200	Miranda	200	Plessisville	1,559
Cheneville	505	Gracefield	300	L'Anse au Foin	500	Mistassini	750	Point au Pic	610
Cherry River	300	Granby	4,750	La Patrie	850	Moisie	351	Pointe a Calumet	250
Chesterville	263	Grand Cascapedia	450	La Petite Riviere	200	Mominique	548	Pointe au Chene	450
Chicot	675	Grande Baie	1,300	La Plaine	400	Montcalm	350	Pointe aux Trembles	1,250
Chicoutimi	5,880	Grande Freniere	310	Laprairie	2,388	Montcalm, (Montcalm)	400	Pointe Bleue	400
Christieville	200	Grand Ligne	200	La Presentation	300	Montebello	954	Pointe Claire	1,013
Clarenceville	450	Grand Mere	4,783	Larochelle	391	Montfort	400	Pointe du Lac	1,275
Coaticook	3,165	Grand Metis	250	L'Assomption	1,747	Mont Joli	2,141	Pointe Gatineau	1,751
Como	1,210	Grand Pabos	600	La Tuque	2,934	Mont Laurier	752	Point Fortune	311
Compton	382	Grand River	2,500	Laurentides	1,128	Mont Louis	300	Point St. Peter	1,000
Contrecœur	629	Grand Saint Esprit	360	Laurierville	399	Montmagny	2,616	Pontbriand	600
Cookshire	996	Grand Vallee	325	Lauzon	3,978	Montmorency	1,717	Pont Chateau	425
Corner of the Beach	300	Green River	200	Laval	322	Montreal	466,197	Pont de Maskinonge	900
Coteau du Lac	428	Grenville	1,383	Lavaltrie	900	Montreal So	790	Pont Rouge	1,600
Coteau Landing	385	Grondines	1,100	L'Avenir	1,200	Montreal W	703	Pont Viau	700
Coteau Station	636	Hatley	498	La Visitation	430	Mont St. Hilaire	475	Portage du Fort	365
Cote des Neiges	2,447	Hebertville	2,800	Lawrenceville	226	Morin Flats	380	Port Daniel Cen.	1,500
Cote Rouge	250	Hemmingford	313	Leclercville	530	Moulin Charette	220	Portneuf	1,450
Cote St. Luc	303	Henryville	1,000	Leeds Village	200	Mount Carmel	1,075	Portneuf	300
Cote St. Michel	500	Herbertville	655	Lemieux	200	Mount Johnson	450	Portneuf Station	200
Cote St. Vincent	350	Holland's Mills	400	Lennoxville	1,211	Mt. Royal Vale	400	Powers' Court	220
Cowansville	881	Honoreville	500	L'Epiphanie	1,700	Murray Bay	4,600	Precieux Sang	525
Cross Point	700	Hopetown	2,000	Les Eboulements	3,000	Namur	300	Providence	894
Cushing	280	Howick	230	Les Ecureuils	200	Napierville	691	QUEBEC	78,067
Dalhousie Station	400	Huberdeau	350	Les Escoumains	800	Neuville	1,500	Quyon	806
Dalibaire	1,500	Hudson	650	Levis	7,448	Newbois	875	Radford	300
Dalling	200	Hull	18,217	Liniere	300	New Carlisle	1,160	Radnor Forges	350
Danby	200	Hunterstown	800	L'Islet	2,450	New Glasgow	131	Radstock	650
Danville	1,331	Huntingdon	1,265	Little Cascapedia	400	New Liverpool	3,400	Rapide de l'Orignal	1,000
De Lorimier	1,275	Huntingville	250	Little Metis	500	Newport	1,000	Rawdon	1,425
De Ramsay	300	Huron	368	Little Metis Station	300	New Richmond	3,000	Restigouche	525
Des Chaillons	2,230	Iberville	1,905	Little Pabos	400	New Richmond Station	400	Riceburg	250
Deschambault	1,200	Inverness	194	Little River E.	200	New Rocklands	176	Richardville	1,300
Deschenes Mills	200	Iron Hill	300	Little River W.	250	Nicolet	2,593	Richelieu	336
D'Israeli	1,606	Ironside	300	Lochaber Bay	800	Nominingue	600		
Dixville	404	Island Brook	400	Longue Pointe	3,037	No. Clarendon	200		
Dorion	631	Isle au Noix	2,200	Longueuil	4,016	No. Ham	1,800		
Dorval	1,049	Isle aux Coudres	1,200	Lorette	1,591	No. Hatley	250		
Douglastown	1,100	Isle aux Grues	800	Lorraineville	300	No. Nation Mills	200		
Drummondville	1,725	Isle Bizard	800	Lost River	300	No. Onslow	1,200		
Dunham	296	Isle Dupas	375	Lotbiniere	1,500	No. Stanbridge	250		
Dunkin	200	Isle Perrot	360	Louiseville	1,675	No. Stukely	2,000		
E. Angus	1,400	Isle Verte	2,250	Lower Ireland	850	No. Wakefield	250		
E. Broughton	1,000	Johnville	300						
E. Clifton	650	Joliette	6,346						

QUEBEC Cont'd.		QUEBEC Cont'd.		QUEBEC Cont'd.		QUEBEC Cont'd.		QUEBEC Cont'd.	
Richmond	2,175	St. Bonaventure	1,450	Ste. Cecile de Whitton	500	Ste. Theodosie	590	St. Jerome de Matane	2,056
Rigaud	856	St. Boniface de Shawinigan	1,250	Ste. Claire	1,600	Ste Therese	2,120	St. Joachim	875
Rimouski	3,097	St. Bruno, Chambly	195	Ste. Clothilde	375	St. Etienne des Gres	2,000	St. Johns	6,500
Ripon	1,500	St. Bruno, (Chicoutimi)	373	Ste. Croix	2,300	St. Eugene	1,000	St. Joseph (Beauce)	1,440
River Beaudette	275	St. Bruno	725	Ste. Dorothee	850	Ste. Ursule	2,000	St. Joseph, (Richilieu)	1,416
Riviere a Claude	250	St. Camille	1,100	St. Edouard	300	St. Eustache	996	St. Joseph	514
Riviere Beaudette	368	St. Canute	575	Ste. Edwidge	1,000	St. Evariste de Forsyth	1,500	St. Joseph d'Alma	1,500
Riviere Bois Clair	1,275	St. Casimir	3,000	Ste. Elizabeth	490	Ste. Victoire	200	St. Joseph de Sorel	400
Riviere Desert	500	St Cecile de Masham	600	Ste. Elizabeth de Warwick	450	St. Fabien	250	St. Joseph de Soulanges	887
Riviere du Loup	6,733	St. Celestin	1,900	Ste. Famille	775	St. Faustin	600	St. Joseph du Lac	450
Riviere Gentilly	250	St. Cesaire	941	Ste. Felicite	2,000	St. Felicien	1,200	St. Jovite	1,200
Riviere la Magdelaine	200	St. Charles	2,100	Ste. Flavie	1,200	St. Felix de Kingsey	500	St. Jovite Station	250
Riviere Ouelle	1,600	St. Charles, (St. Hyacinthe)	900	Ste. Flavie Sta	800	St. Felix de Valois	2,200	St. Jude	600
Riviere St. Jean	250	St. Charles de Caplin	230	Ste. Flore	350	St. Ferdinand	2,200	St. Justin	1,650
Rivieres des Prairies	750	St. Christine	600	Ste. Foye	1,150	St. Fereol	1,050	St. Lambert	3,350
Riviere Trois Pistoles	500	St. Chrysostome	600	Ste. Francoise	200	St. Fidele	900	St. Laurent	3,503
Robertsonville	603	St. Claude	220	Ste. Genevieve	300	St. Flavien	1,500	St. Laurent d'Orleans	760
Roberval	1,737	St. Clet	475	Ste. Genevieve de Batiscan	1,000	St. Fortunat	800	St. Lazare	2,200
Robitaille	400	St. Cœur de Marie	700	Ste. Gertrude	1,750	St. Francois	2,000	St. Lazare de Vaudreuil	1,450
Rochon	200	St. Columbin	800	Ste. Helene, (B'got)	1,000	St. Francois de Salle	900	St. Leon	1,625
Rock Forest	200	St. Come	1,000	Ste. Helene	1,275	St. Francois d'Orleans	550	St. Leonard	1,775
Rock Island	861	St. Constant	1,700	Ste. Helene de Chester	1,050	St. Francois du Lac	2,200	St. Liboire	550
Rougemont Station	300	St. Cunegonde	11,177	Ste. Henedine	1,100	St. Francois Xavier de Brompton	850	St. Liguori	1,125
Roxton Falls	873	St. Cuthbert	3,150	Ste. Hippolyte de Kilkenny	850	St. Frederick	375	St. Louis de Bonsecour	630
Roxton Pond	500	St. Cuthbert Sta	275	Ste. Julie	1,350	St. Gabriel de Brandon	1,431	St. Louis de Gonzague	700
Ruisseau a Sem	200	St. Cyrille	711	Ste. Julienne	1,100	St. George de Malbaie	630	St. Louis de Ha Ha	450
Ruisseau le Blanc	325	St. Cyrille de Wendover	500	Ste. Justine de Newton	500	St. George de Windsor	1,550	St. Louis de Mile End	10,950
Sabrevois	200	St. Damase, (St. Hyacinthe)	1,075	Ste. Eleuthere	1,200	St. Georges	1,410	St. Luc	650
Sacre-Cœur de Jesus	996	St. Damase	2,000	Ste. Elie	1,300	St. Germain de Grantham	3,100	St. Ludger	1,300
Sacre-Cœur de Marie	800	St. Damase des Aulnais	1,000	Ste. Eloi	1,300	St. Germain de Kamouraska	700	St. Majoric	500
St. Adelphe de Champlain	800	St. David	1,800	Ste. Louise	900	St. Gervais	2,000	St. Malo	200
St. Adrien	500	St. David de l'Aube Riviere	200	Ste. Luce	700	St. Giles	730	St. Marc	950
St. Agapit	300	St. Denis	950	Ste. Luce Station	500	St. Gregoire	1,800	St. Marcel, (L'Islet)	300
St. Aime	2,000	St. Denis, (St. Hyacinthe)	733	Ste. Lucie de Doncaster	1,350	St. Guillaume	905	St. Marcel	950
St. Alban	2,150	St. Didace	1,300	St. Elzear	300	St. Guillaume d'Upton	2,975	St. Martin	446
St. Albert	450	St. Dominique	1,850	St. Elzear de Laval	725	St. Henri	30,337	St. Mathias	300
St. Alexandre, (Iberville)	1,500	St. Donat	800	Ste. Madeleine	1,050	St. Henri, (Levis)	2,200	St. Mathieu	1,000
St. Alexandre	1,760	St. Donat de Montcalm	325	Ste. Malachi	2,000	St. Hermas	600	St. Maurice	400
St. Alexis de Montcalm	1,850	Ste. Adelaide de Pabos	600	Ste. Marguerite (Dorchester)	1,000	St. Hermenegilde	200	St. Maurice Forges	350
St. Alexis des Monts	1,150	Ste. Adele	2,050	Ste. Marguerite	580	St. Hilaire	1,650	St. Michel	2,000
St. Alphonse	930	Ste. Agathe	375	Ste. Marie	3,000	St. Hilarion	3,000	St. Michel, (Napierville)	1,700
St. Alphonse de Granby	500	Ste. Agathe des Monts	2,020	Ste. Marie de Blandford	450	St. Hubert, (Chambly)	1,100	St. Michel de Rougemont	1,050
St. Anaclet	800	Ste. Agnes de Charlevoix	1,750	Ste. Marie Salomee	580	St. Hubert	500	St. Michel des Saints	850
St. Andre	1,300	Ste. Anastasie	1,300	Ste. Marthe	1,300	St. Hughes	2,000	St. Michel de Wentworth	375
St. Andre Avelin	3,500	Ste. Angele	400	Ste. Martine	1,700	St. Hyacinthe	9,797	St. Modeste	1,000
St. Andre Restigouche	400	Ste. Angele de Laval	900	Ste. Melanie	700	St. Ignace de Loyola	250	St. Moise	637
St. Andrews E	1,000	Ste. Angele de Monnoir	1,350	St. Emile de Suffolk	1,350	St. Irenée	1,075	St. Narcisse	2,500
St. Anicet	200	Ste. Anne de Beaupré	1,326	St. Emilie de l'Energie	200	St. Isidore, (La Prairie)	2,300	St. Nazaire, (Bagot)	1,000
St. Anne	799	Ste. Anne de Bellevue	1,416	Ste. Monique (Nicolet)	1,900	St. Isidore	1,900	St. Nazaire	500
St. Anselme	2,000	Ste. Anne de la Perade	2,850	Ste. Monique	575	St. Isidore Jc	200	St. Nicholas	400
St. Antoine	1,600	Ste. Anne de la Pocatiere	2,500	Ste. Perpetue	1,100	St. Jacques	2,600	St. Norbert	275
St. Antoine Abbe	200	Ste. Anne des Monts	1,300	Ste. Perpetue, (L. Islet)	1,175	St. Jacques le Mineur	1,200	St. Norbert, (Berthier)	375
St. Antoine de Tilly	1,250	Ste. Anne des Plaines	1,325	Ste. Philomene	250	St. Janvier	1,125	St. Octave	1,300
St. Antonin	1,500	Ste. Beatrix	1,890	Ste. Ephrem	1,518	St. Jean	5,903	St. Odilon	1,500
St. Appollinaire	1,000	Ste. Brigide	1,630	St. Epiphane	1,200	St. Jean Baptiste	1,500	St. Omer	500
St. Armand Station	350	Ste. Brigitte des Saults	550	Ste. Rosaire	775	St. Jean de Dieu	1,080	St. Onezime	900
St. Arsene	1,500	Ste. Calixte de Kilkenny	1,180	Ste. Rosalie	1,500	St. Jean de Matha	2,700	St. Ours	622
St. Aubert	1,700	Ste. Catherine	1,100	Ste. Rose	1,868	St. Jean d'Orleans	1,200	St. Pacome	1,500
St. Augustin	1,215	Ste. Cecile d'Levrard	500	Ste. Rose du Degele	625	St. Jean l'Evangeliste	2,000	St. Pamphile	1,800
St. Barnabe, (Hya)	980			Ste. Scholastique	757	St. Jean Port Joli	2,000	St. Paschal	2,350
St. Barnabe	2,100			Ste. Sophie	1,150	St. Jerome, (Chicoutimi)	719	St. Paul de Chester	2,000
St. Barthelemi	600			St. Esprit	1,960	St. Jerome	3,479	St. Paul de la Croix	1,000
St. Basile	350			Ste. Thecle	1,800				
St. Bazile le Grand	760								
St. Benoit	345								
St. Benoit Labre	300								
St. Bernard	1,500								
St. Blaise	400								

QUEBEC Cont'd.	
St. Paul d'Industrie	1,375
St. Paul du Buton	1,400
St. Paulin	1,875
St. Paul l'Hermite	200
St. Paul's Bay	1,857
St. Philemon	400
St. Philippe	200
St. Philippe d'Argenteuil	375
St. Philomene de Fortierville	1,600
St. Pie	768
St. Pie de Guire	680
St. Pierre aux Liens	2,201
St. Pierre Baptiste	1,100
St. Pierre de Wakefield	250
St. Pierre d'Orleans	630
St. Pierre les Becquets	2,000
St. Pierre Montmagny	1,400
St. Placide	575
St. Polycarpe	804
St. Prospere	1,300
St. Prospere de Dorchester	800
St. Prudentienne	510
St. Raphael	2,700
St. Raymond	1,653
St. Redempteur	375
St. Remi	1,021
St. Remi d'Amherst	1,000
St. Remi de Tingwick	950
St. Robert	1,400
St. Roch	900
St. Roch des Aulnais	1,500
St. Roch l'Achigan	2,375
St. Romain	600
St. Romuald	3,575
St. Samuel de Gayhurst	850
St. Sauveur des Montagnes	1,560
St. Sebastien	300
St. Sebastien de Beauce	600
St. Severe	800
St. Severin de Beaurivage	1,100
St. Simeon	512
St. Simon, (Bagot)	1,160
St. Simon	1,200
St. Sixte	500
St. Stanislas	4,000
St. Stanislas de Kostka	200
St. Sulpice	700
St. Sylvestre	3,000
St. Theodore d'Acton	1,200
St. Theodore de Chertsey	1,425
St. Thomas d'Aquin	200
St. Thomas de Joliette	250
St. Timothee	450
St. Timothee de Champlain	900
St. Tite	1,438
St. Tite des Caps	1,025
St. Ubalde	1,400
St. Urbain	300
St. Valentin	300
St. Valerien	300
St. Valier	600
St. Valier Station	600
St. Victor de Tring	2,000
St. Vincent de Paul	1,498
St. Wenceslas	1,675
St. Zephirin	1,750
St. Zotique	400
Sandy Bay	3,500
Sandy Beach Centre	500
Saraguayville	275
Sault au Recollet	1,311
Sawyerville	432
Scotstown	933
Scott Jc.,	200
Seal Cove	200
Senneville	530
Shawbridge	255
Shawenegan Falls	4,265
Shawville	715
Sherbrooke	16,405
Sherrington	450
Shigawake	875
Shrewsbury	225
Sillery Cove	500
Silver Creek	250
Sorel	8,419
So. Durham	1,150
So. Ham	500
So. Stukely	360
Spring Hill	500
Stanbridge	900
Stanbridge E.	600
Stanbridge Station	300
Standon	1,600
Stanfold	2,300
Stanstead	837
Stoke Centre	300
Stonefield	285
Stoneham	400
Suffield	200
Sutton	986
Sweetsburgh	305
Tadousac	610
Terrebonne	1,990
Thetford Mines	7,261
Three Rivers	14,441
Thurso	601
Tingwick	2,150
Tremblay	2,500
Trois Pistoles	3,000
Trois Saumons	400
Trout Brook	350
Trout River	300
Turcot	200
Ulverton	200
Upton	746
Valcartier	1,500
Valcourt	225
Val des Bois	500
Valleyfield	9,447
Valois	400
Valracine	200
Varennes	820
Vaudreuil	444
Vaudreuil Station	300
Vercheres	725
Verdun	11,627
Vernet	200
Versailles	200
Viau Ville	200
Victoriaville	3,028
Village des Aulnais	1,500
Village Richelieu	400
Ville Marie	850
Villeray	1,162
Villers	330
Ville St. Pierre	1,500
Vincennes	500
Vinton	400
Wabassee	200
Wakefield	250
Warden	250
Warwick	928
Waterloo	1,886
Waterville	1,052
Ways' Mills	250
Weedon	500
Weedon Centre	836
Weedon Station	2,000
W. Brome	200
W. Broughton	4,500
Westbury	330
Westmount	14,327
W. Shefford	363
Wheatland	450
Wickham West	1,200
Windsor Mills	2,233
Woburn	350
Wotton	1,750
Wright	300
Yamachiche	965
Yamaska	695

SASKATCHEWAN

Aberdeen	240
Abernethy	252
Adanac	73
Alameda	283
Allan	139
Alsask	200
Antler	150
Arcola	794
Asquith	200
Atwater	57
Aylesbury	72
Balcarres	348
Balgonie	368
Barrows	350
Battleford	1,331
Belle Plain	57
Biggar	315
Birch Hills	145
Birmingham	31
Bladworth	164
Borden	96
Broadview	702
Brock	117
Broderick	130
Brownlee	171
Bruno	37
Buchanan	228
Bulyea	117
Candiac	30
Canora	426
Carievale	188
Carlyle	358
Carnduff	469
Coblenx	222
Churchbridge	90
Clavet	37
Craven	93
Creelman	100
Cupar	221
Dana	85
Davidson	389
Delisle	235
Delmas	89
Disley	99
Drake	66
Drinkwater	225
Dubuc	161
Duck Lake	768
Dundurn	239
Earl Grey	154
Edam	53
Elbow	221
Elfros	103
Elstow	114
Esterhazy	258
Estevan	1,925
Eyebrow	182
Fairlight	96
Fenwood	51
Fielding	77
Fillmore	187
Fleming	267
Foam Lake	185
Forget	267
Fort Qu'Appelle	285
Francis	263
Gainsboro	247
Glenavon	130
Glen Ewen	168
Govan	390
Grand Coulee	82
Grayson	124
Grenfell	709
Griffin	109
Gull Lake	606
Hague	300
Halbrite	239
Hanley	381
Harris	106
Hawarden	126
Herbert	200
Heward	132
Howell	122
Hudson Bay Jc.,	215
Humboldt	859
Hurburt	559
Imperial	250
Indian Head	1,285
Iturna	94
Jansen	63
Jasmin	130
Kamsack	473
Keeler	74
Kelliher	220
Kenaston	185
Kennedy	164
Kerr Robert	250
Killaly	92
Kindersley	456
Kinistino	166
Kinley	51
Kipling	237
Kisbey	269
Lampman	98
Lang	301
Langenburg	220
Langham	386
Lanigan	392
Lashburn	232
Lemberg	303
Leney	57
Leslie	126
Lipton	273
Lloydminster	441
Lockwood	101
Loreburn	135
Lumsden	695
McTaggart	134
Macklin	322
Macoun	187
Maidstone	92
Manor	289
Maple Creek	936
Marquiss	88
Maryfield	209
Maymont	118
Melfort	599
Melville	1,816
Midale	156
Milestone	436
Montmartre	201
Moosejaw	13,823
Moosomin	1,143
Morse	571
Mortlach	219
Muenster	52
Netherhill	78
Neudorf	326
Nokomis	374
No. Battleford	2,105
No. Portal	296
Ogema	300
Osler	62
Outlook	679
Oxbow	630
Paynton	121
Pense	236
Perdue	155
Prince Albert	6,254
Punnichy	73
Qu'Appelle Sta	850
Quill Lake	163
Quinton	76
Radisson	305
Raymore	126
Redvers	200
REGINA	30,210
Rocanville	266
Roche Percee	250
Roche Perin	162
Rosetown	317
Rosthern	1,172
Rouleau	400
Saltcoats	432
Saskatoon	12,002
Scott	420
Sedley	221
Sheho	107
Sintaluta	391
Southey	157
Springside	123
Spyhill	71
Star City	84
Stockholm	150
Stoughton	311
Strassburg	811
Summerbury	79
Swift Current	1,852
Tantallon	115
Tate	48
Taylorton	350
Tessier	87
Theodore	193
Tisdale	250
Togo	111
Tugaske	200
Tuxford	121
Tyvan	184
Unity	149
Venn	58
Viscount	72
Vonda	270
Wadena	255
Waldron	114
Wapella	485
Warman	149
Watrous	781
Watson	211
Wauchope	127
Wawota	200
Webb	70
Welwyn	139
Weyburn	2,210
Whitewood	447
Wilcox	262
Wilkie	537
Windthorst	208
Wolseley	961
Wynyard	515
Yellow Grass	450
Yorkton	2,302
Young	82
Zealandia	264
Zelma	42

HANDY BOOK OF FACTS

THINGS EVERYONE SHOULD KNOW

CONTENTS

United States Government	2-6
Postal Regulations	7-9
State Facts	10-11
Weights and Measures	12-16
Value of Rare U. S. Coins	17
Rules for Computing Interest	18
Legal Holidays	19
United States Bankruptcy Law	19
Patents and Trade-Marks	20-21
How to get a Copyright	22-23
Important Dates in American History	24-25
The Panama Canal	26
Statistics of the World	27-29
Explorations and Discoveries	30-32

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UNITED STATES GOVERNMENT

EXECUTIVE DEPARTMENT

	Salary.
President—Woodrow Wilson of New Jersey..... (Presidential term expires March 4th, 1917.)	*$75,000
Vice-President—Thomas R. Marshall of Indiana	12,000
Secretary to President—Joseph P. Tumulty of N. J...	7,500

CABINET PORTFOLIOS

(Officers appointed by President for no fixed term.)

Department of State

Sec. of State—William Jennings Bryan of Nebraska . $12,000

Duties.—To attend to all correspondence with the ambassadors and consuls of the U. S., and with representatives of foreign powers sent to the U. S.; and to negotiations relating to foreign affairs of the U. S. He is also the medium of correspondence between the President and the governors of the States; also of foreign executives. He countersigns and affixes the U. S. seal to all executive proclamations. He is custodian of the treaties made with foreign states, and of the laws of the U. S. He grants and issues passports. He is also charged with certain annual reports to Congress relating to commercial information received from diplomatic and consular officers.

Department of the Treasury

Sec. of Treasury—William Gibbs McAdoo of N. Y... $12,000

Duties.—To manage national finances, superintend collection of all revenues. He is the government bookkeeper and grants all warrants for moneys expended. Submits to government an annual budget. He also controls the construction of public buildings; the coinage and printing of money; the administration of the life-saving, revenue cutter, and the public health and marine hospital branches of the public service. General supervision over national banks.

Department of War

Sec. of War—Lindley Miller Garrison of N. J..... $12,000

Duties.—General supervision of Army; also supervision of construction of Panama Canal; the U. S. Military Academy at West Point; national cemeteries; publication of Official Records of the War of the Rebellion; Board of Ordnance and Fortification and matters relating to river and harbor improvements; establishment of harbor lines, and approves plans and locations of bridges which are constructed over navigable waters of the U. S.

Department of Justice

Attorney-General—James Clark McReynolds of Tenn. $12,000

Duties.—Represents the U. S. and the Cabinet in all matters of law; exercises a general superintendence and direction over U. S. attorneys and marshals in all judicial districts, and provides special counsel for the U. S. whenever required by any department of the government. Has charge of all prosecutions against illegal combinations under the Sherman Anti-Trust Law.

Post Office Department

Postmaster-General—Albert Sidney Burleson of Texas $12,000

Duties.—Appoints all officers and employes of the Dept., except the four Assistant Postmaster-Generals and the Purchasing Agent, who are appointed by the President; appoints postmasters whose compensation does not exceed $1,000; makes postal treaties with foreign governments, with the advice and consent of the President. General charge of the postal service.

Navy Department

Sec. of Navy—Josephus Daniels of North Carolina.... $12,000

Duties.—General supervision over Navy. Superintends construction armament and employment of warships. Has charge of Navy Yards.

Department of Interior

Sec. of Interior—Franklin Knight Lane of Cal..... $12,000

Duties.—Superintends the bureaus for patents, pensions and bounty lands, public lands and surveys, the Indians, education, railroads, geological survey, reclamation of arid lands, investigation of methods of mining. Has charge of all national parks and reservations and the distribution of appropriations for agricultural and mechanical colleges.

*$25,000 also allowed for traveling expenses.

Department of Agriculture

Sec. of Agriculture—David Franklin Houston of Mo.. $12,000

Duties.—Besides having general supervision of business relating to agriculture and the gathering of agricultural statistics, he has charge of the Weather Bureau and the Forest Service. He also has control of the quarantine stations for imported cattle, of interstate quarantine rendered necessary by sheep and cattle diseases, and of the inspection of cattle-carrying vessels; and directs the enforcement of the meat inspection and food and drug laws under which the inspection of domestic and imported food products is carried on. He enforces the laws prohibiting the transportation of interstate commerce of game killed in violation of local laws. He furnishes sample seeds of various vegetables and flowers.

Department of Commerce

Sec. of Commerce—William Cox Redfield of N. Y.... $12,000

Duties.—To promote mining, manufacturing, shipping, fishery, and transporting interests. His duties also comprise investigation of corporations. He has charge of the Light House Service, taking of the census, making of coast and geodetic surveys, collecting of statistics relating to foreign and domestic commerce, inspection of steamboats, supervision of fisheries, supervision and control of the Alaskan fur seal, salmon and other fisheries, and jurisdiction over merchant vessels and seamen of the U. S.

Department of Labor

Sec. of Labor—William Bauchop Wilson of Penn.....$12,000

Duties.—To promote and develop the welfare of wage earners. He is also charged with the administration of the laws relating to immigration and the chinese exclusion laws. The Bureau of Naturalization and the Bureau of Labor Statistics come under this department as well as the Children's Bureau.

THE JUDICIARY

Supreme Court of the United States

Justices.	Born.	Appointed.
Edward D. White, Chief Justice, La..	Nov. 3, 1845	†1910
Joseph Mc'Kenna, California.....	Aug. 10, 1843	1898
Oliver Wendell Holmes, Mass	Mar. 8, 1841	1902
William R. Day, Ohio.....	Apr. 17, 1849	1903
Horace H. Lurton, Tennessee.....	1844	1910
Charles E. Hughes, New York.....	Apr. 11, 1862	1910
Willis Van Devanter, Wyoming.....	Apr. 17, 1859	1910
Joseph R. Lamar, Georgia.....	Oct. 14, 1857	1911
Mahlon Pitney, New Jersey.....	Feb. 5, 1858	1912

The salary of the Chief Justice is $15,000, of each Associate Justice $14,500. The term is "during good behavior."

Circuit Courts of Appeals

There are nine Circuit Courts covering the various sections of the country. Each court is presided over by a justice from the Supreme Court when possible. Other members are District Judges specially designated in the circuit. Salary $7,000.

District Courts

There are over 90 District Courts in the United States distributed according to population. The judges receive an annual salary of $6,000.

Commerce Court

In 1909 Congress established a Commerce Court to have jurisdiction over all cases for the enforcement of orders of the interstate commerce commission except those where the payment of money was involved. There are five judges, each receiving an annual salary of $7,000 and $1,500 for expenses.

Court of Customs Appeals

Composed of five judges to hear and decide questions as to classification and rates of dutiable goods. A court created by the tariff act of 1909.

DIPLOMATIC SERVICE OF THE UNITED STATES

AMBASSADORS

Country, Name and State, from whence appointed	Salary
Austria-Hungary—F.C. Penfield, Pa.	$17,500
Brazil—Edwin V. Morgan, N. Y.	17,500
France—Myron T. Herrick, Ohio.	17,500
Germany—James W. Gerard, N. Y.	17,500
Great Britain—Walter H. Page, N. Y.	17,500
Italy—Thomas Nelson Page, Va.	17,500
Japan—Geo. W. Guthrie, Pa.	17,500
Mexico—Vacant	17,500
Russia—Curtis Guild, Mass.	17,500
Turkey—Henry Morgenthau, New York.	17,500

ENVOYS EXTRAORDINARY AND MINISTERS PLENIPOTENTIARY

Argentina—John W. Garrett, Md.	$12,000
Belgium—Theodore Marburg, Md.	12,000
Bolivia—John D. O'Rear, Mo.	10,000
*Bulgaria—John B. Jackson, N. J.	10,000
Chile—Henry P. Fletcher, Pa.	12,000
China—William J. Calhoun, Ill.	12,000
Colombia—T. A. Thomson, Tex.	10,000
Costa Rica—Edward J. Hale, N. C.	10,000
Cuba—William E. Gonzales, S. C.	12,000
Denmark—Maurice F. Egan, D. C.	10,000
Dominican Republic—W. W. Russell, D. C.	10,000
Ecuador—Chas. S. Hartman, Mont.	10,000
†Greece—J. G. Schurman, N. Y.	10,000
Guatemala—William Hayne Leavell, Miss.	10,000
Haiti—H. W. Furniss, Ind.	10,000
Honduras—Charles D. White, N. J.	10,000
Morocco—Vacant	10 000
‡Netherlands—Henry Van Dyke, N. J.	12,000
Nicaragua—Benj. L. Jefferson, Colo.	10,000
Norway—A. G. Schmedeman, Wisc.	10,000
Panama—H. Percival Dodge, Mass.	10,000
||Paraguay—Nicolay A. Grevstad, Ill.	10,000
Persia—C. W. Russell, D. C.	10,000
Peru—Benton McMillin, Tenn.	10,000
Portugal—Cyrus E. Woods, Pa.	10,000
Salvador—Wm. Heimke, Kans.	10,000
Siam—Fred. W. Carpenter, Cal.	10,000
Spain—Joseph E. Willard, Va.	12,000
Sweden—Chas. H. Graves, Minn.	10,000
Switzerland—P. A. Stovall, Ga.	10,000
Venezuela—Elliott Northcott, W. Va.	10,000

*Accredited to Roumania, Servia and Bulgaria.
†Accredited also to Montenegro.
‡Accredited also to Luxemburg.
||Accredited also to Uruguay.

CONSULAR SERVICE

The consular service was reorganized in 1908 allowing for 57 consuls general divided into seven classes according to importance. The consuls general representing us at London and Paris belong to the first class. Each receives a salary of $12,000. The consuls general at Berlin, Havana, Hamburg, Hongkong, Rio de Janeiro and Shanghai represent the second class and each receives $8,000. The salary in the other classes varies from $3,000 to $6,000.

Besides the consuls general there are 240 consuls and 255 consular agents located in the principal cities of the various countries of the world, each receiving a salary ranging from $2,000 to $8,000.

AMBASSADORS FROM FOREIGN COUNTRIES AT WASHINGTON

Unless otherwise indicated names given are those of Envoys Extraordinary and Ministers Plenipotentiary. A. E. and P. means Ambassador Extraordinary and Plenipotentiary.

Argentina—Mr. Rómula S. Naón.
Austria-Hungary—Dr. Constantin T. Dumba, A. E. and P.
Belgium—Mr. E. Havenith.
Bolivia—Señor Ignacio Calderon.
Brazil—Mr. Domicio da Gama, A. E. and P.
Chile—Señor Don Eduardo Suarez.
China—Mr. Chang Yin Tang.
Colombia—Señor Julio Betancourt.
Costa Rica—Señor Don Joaquin Bernardo Calvo.
Cuba—Dr. Pablo Desvernine.
Denmark—Constantin Brun.
Dominican Republic—Señor Dr. Don Francisco J. Peynado.
Ecuador—Señor Dr. Don Gonzalo S. Córdova.
France—J. J. Jusserand, A. E. and P.
Germany—Count Johan Heinrich von Bernstorff, A. E. and P.
Great Britain—Sir Cecil Arthur Spring-Rice, A. E. and P.
Greece—L. A. Coromilas.
Guatemala—Señor Don Joaquin Méndez.
Haiti—Mr. Ulrich Duvier.
Honduras—Dr. Alberto Membreno.
Italy—Marquis Cusani Confalonieri, A. E. and P.
Japan—Viscount Sutemi Chinda, A. E. and P.
Mexico—Señor Don Manuel Calero, A. E. and P.
Netherlands—Jonkheer J. Loudon.
Nicaragua—Señor Gen. Don Emiliano Chamorro.
Norway—Mr. H. H. Bryn.
Panama—Don Eusebio A. Morales.
Paraguay—Mr. Hector Velasquez.
Persia—Mirzi Ali Kuli Khan, Chargé d'Affaires.
Peru—Mr. Frederico Alfonso Pezet.
Portugal—Viscount de Alte.
Russia—Mr. George Bakhméteff, A. E. and P.
Salvador—Señor Don Frederico Mejía.
Siam—Prince Traidos Prabandh.
Spain—Señor Don Juan Riaño y Gayangos.
Sweden—Mr. W. A. F. Ekengren.
Switzerland—Dr. Paul Ritter.
Turkey—Youssouf Zia Pacha, A. E. and P.
Uruguay—Dr. Carlos Maria de Pena.
Venezuela—Señor Don P. E. Rojas.

BIRD LAWS OF THE UNITED STATES

Bird hunters should be careful that they are not violating the new Federal Law regarding migratory birds, for in many instances it conflicts with the State Law, and in all cases supersedes it.

Birds that may be shot are divided by the new regulations into four classes. These and the open seasons allowed on them follow:

	Northern Zone	Southern Zone
1. Water fowl	Sept. 1—Dec. 15	Oct. 1—Jan. 15
2. Rail	Sept. 1—Dec. 1	Sept. 1—Dec. 1
3. Woodcock	Oct. 1—Dec. 1	Nov. 1—Jan. 1
4. Shore birds	Sept. 1—Dec. 15	Sept. 1—Dec. 15

Generally speaking, the country is divided into two zones, northern and southern, the dividing line running wholly or in part north of latitude 40 degrees and the Ohio River.

The twenty-five States included in the northern zone comprise: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, North Dakota, South Dakota, Nebraska, Colorado, Wyoming, Montana, Idaho, Oregon, and Washington.

The twenty-three States included in the southern zone are: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North and South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, Kentucky, Missouri, Arkansas, Louisiana, Texas, Oklahoma, Kansas, New Mexico, Arizona, California, Nevada and Utah.

By way of summarization the following statement may be made:

(1) Exceptions have been made in both zones for numerous reasons, but in most cases the closed seasons take the average of the existing laws of the States in the particular zones in which they are located.

(2) There has been more cutting down on the closing than the opening dates of the shooting seasons as they now exist.

(3) In most cases three months of open shooting are allowed for water fowl, and in some cases as much as three and a half months.

(4) Spring shooting is absolutely prohibited.

(5) Shooting of migratory birds between sunset and sunrise is likewise prohibited.

(6) In no case will there be less than thirty days when birds may be shot during the period of their greatest abundance.

A novel and important feature is the prohibition of hunting on the great rivers of the country, except during November and December. Prohibited territory, as designated by the regulations in this instance, is as follows:

(1) Mississippi River from New Orleans to Minneapolis.
(2) Ohio River from its mouth to Pittsburgh.
(3) Missouri River between its mouth and Bismarck, N. D.

SENATE OF THE UNITED STATES
(63RD CONGRESS, 1913)

Members of the Senate are elected by the Electorate of the various States for a term of six years. Salary, $7,500 per year and mileage.

President.....Vice-Pres. Thomas R. Marshall, Indiana
President, pro tem.....James P. Clark, Arkansas
Secretary.....James M. Baker, D. C.

Term.		Home Address
	ALABAMA	
1915	Vacant.....	
1919	John H. Bankhead, D.....	Fayette
	ARIZONA	
1917	Henry F. Ashhurst, D.....	Prescott
1915	Marcus A. Smith, D.....	Tucson
	ARKANSAS	
1915	James P. Clarke, D.....	Little Rock
1919	Joe T. Robinson, D.....	Little Rock
	CALIFORNIA	
1915	George C. Perkins, R.....	Oakland
1917	John D. Works, R.....	Los Angeles
	COLORADO	
1915	Chas. S. Thomas, D.....	Denver
1919	John F. Shafroth, D.....	Denver
	CONNECTICUT	
1915	Frank B. Brandegee, R.....	New London
1917	Geo. P. McLean, R.....	Simsbury
	DELAWARE	
1917	Henry A. du Pont, R.....	Winterthur
1919	Willard Saulsbury, D.....	Wilmington
	FLORIDA	
1915	Duncan U. Fletcher, D.....	Jacksonville
1917	Nathan P. Bryan, D.....	Jacksonville
	GEORGIA	
1915	Hoke Smith, D.....	Atlanta
1919	Augustus O. Bacon, D.....	Macon
	IDAHO	
1919	Wm. E. Borah, R.....	Boise
1915	James H. Brady, R.....	Pocatello
	ILLINOIS	
1919	Lawrence Y. Sherman, R.....	Springfield
1919	James Hamilton Lewis, D.....	Chicago
	INDIANA	
1915	Ben. F. Shively, D.....	South Bend
1917	John W. Kern, D.....	Indianapolis
	IOWA	
1915	A. B. Cummins, R.....	Des Moines
1919	Wm. S. Kenyon, R.....	Fort Dodge
	KANSAS	
1915	Joseph L. Bristow, R.....	Salina
1919	Wm. H. Thompson, D.....	Garden City
	KENTUCKY	
1919	Ollie M. James, D.....	Marion
1915	Wm. O. Bradley, R.....	Louisville
	LOUISIANA	
1919	Joseph E. Ransdell, D.....	Lake Providence
1915	John H. Thornton, D.....	Alexandria
	MAINE	
1917	Chas. F. Johnson, D.....	Waterville
1919	Edw. C. Burleigh, R.....	Augusta
	MARYLAND	
1919*	William P. Jackson, R.....	Salisbury
1915	John W. Smith, D.....	Snow Hill
	MASSACHUSETTS	
1917	Henry Cabot Lodge, R.....	Nahant
1919	John W. Weeks, R.....	Newton
	MICHIGAN	
1917	Chas. E. Townsend, R.....	Jackson
1919	W. A. Smith, R.....	Grand Rapids
	MINNESOTA	
1917	Moses E. Clapp, R.....	St. Paul
1919	Knute Nelson, R.....	Alexandria
	MISSISSIPPI	
1917	John S. Williams, D.....	Yazoo
1919	James K. Vardaman, D.....	Jackson
	MISSOURI	
1917	James A. Reed, D.....	Kansas City
1915	William J. Stone, D.....	Jefferson City
	MONTANA	
1919	Thomas J. Walsh, D.....	Helena
1917	Henry L. Myers, D.....	Hamilton
	NEBRASKA	
1913	George W. Norris, R.....	McCook
1917	G. M. Hitchcock, D.....	Omaha
	NEVADA	
1915	Francis G. Newlands, D.....	Reno
1917	Key Pittman, D.....	Tonapah
	NEW HAMPSHIRE	
1919	Henry F. Hollis, D.....	Concord
1915	Jacob H. Gallinger, R.....	Concord
	NEW JERSEY	
1919	William Hughes, D.....	Paterson
1917	James E. Martine, D.....	Plainfield
	NEW MEXICO	
1917	Thomas B. Catron, R.....	Santa Fe
1919	Albert B. Fall, R.....	Three Rivers
	NEW YORK	
1915	Elihu Root, R.....	New York
1917	James A. O'Gorman, D.....	New York
	NORTH CAROLINA	
1919	Furnifold McL. Simmons, D.....	Raleigh
1915	Lee S. Overman, D.....	Salisbury
	NORTH DAKOTA	
1915	Asle J. Gronna, R.....	Lakota
1917	Porter J. McCumber, R.....	Wahpeton
	OHIO	
1917	Atlee Pomerene, D.....	Canton
1915	Theodore E. Burton, R.....	Cleveland
	OKLAHOMA	
1915	Thos. P. Gore, D.....	Lawton
1919	Robt. L. Owen, D.....	Muskogee
	OREGON	
1919	Harry Lane, D.....	Portland
1915	George E. Chamberlain, D.....	Portland
	PENNSYLVANIA	
1915	Boies Penrose, R.....	Philadelphia
1917	George T. Oliver, R.....	Pittsburgh
	RHODE ISLAND	
1917	H. F. Lippitt, R.....	Providence
1919	Le Baron B. Colt, R.....	Bristol
	SOUTH CAROLINA	
1919	Benj. R. Tillman, D.....	Trenton
1915	Ellison D. Smith, D.....	Florence
	SOUTH DAKOTA	
1915	Coe I. Crawford, R.....	Huron
1919	Thomas Sterling, R.....	Vermillion
	TENNESSEE	
1917	Luke Lea, D.....	Nashville
1919	John K. Shields, D.....	Knoxville
	TEXAS	
1919	Morris Sheppard, D.....	Texarkana
1917	Charles A. Culberson, D.....	Dallas
	UTAH	
1915	Reed Smoot, R.....	Provo
1917	George Sutherland, R.....	Salt Lake City
	VERMONT	
1917	Carroll S. Page, R.....	Hyde Park
1915	William P. Dillingham, R.....	Waterbury
	VIRGINIA	
1917	Claude A. Swanson, D.....	Chatham
1919	Thomas S. Martin, D.....	Charlottesville
	WASHINGTON	
1917	Miles Poindexter, Prog.....	Spokane
1915	Wesley L. Jones, R.....	North Yakima
	WEST VIRGINIA	
1919	Nathan Goff, R.....	Clarksburg
1917	William E. Chilton, D.....	Charlestown
	WISCONSIN	
1917	R. M. LaFollette, R.....	Madison
1915	Isaac Stephenson, R.....	Marinette
	WYOMING	
1919	Francis E. Warren, R.....	Cheyenne
1917	Clarence D. Clark, R.....	Evanston

*Appointed to fill vacancy.

Republicans	44
Democrats	50
Vacancies	1
Progressive	1
Total	96

HOUSE OF REPRESENTATIVES

Congressmen are elected for two years by direct vote. Salary $7,500 per year and mileage. Salary of Speaker, $12,000.

Dist. ALABAMA
(At Large)
John W. Abercrombie
1 G. W. Taylor, D., Demopolis.
2 S. H. Dent, Jr., D., Montgomery.
3 H. D. Clayton, D., Eufaula.
4 F. L. Blackmon, D., Anniston.
5 J. T. Heflin, D., Lafayette.
6 R. P. Hobson, D., Greensboro.
7 J. L. Burnett, D., Gadsden.
8 W. Richardson, D., Huntsville.
9 O. W. Underwood, D., Birmingham.

ARIZONA
(At Large)
Carl Hayden, D., Phœnix.

ARKANSAS
1 T. H. Caraway, D., Jonesboro.
2 W. A. Oldfield, D., Batesville.
3 J. C. Floyd, D., Yellville.
4 Otis T. Wingo, D., DeQueen.
5 H. M. Jacoway, D., Dardanelle.
6 Samuel M. Taylor, D., Pine Bluff.
7 W. S. Goodwin, D., Warren.

CALIFORNIA
1 Wm. Kent, Ind., Kentfield.
2 John E. Raker, D., Alturas.
3 C. F. Curry, R., Sacramento.
4 Julius Kahn, R., San Francisco.
5 John I. Nolan, P. R., San Francisco.
6 J. R. Knowland, R., Alameda.
7 Denver S. Church, D., Fresno.
8 E. A. Hayes, R., San Jose.
9 C. W. Bell, P. R., Pasadena.
10 Wm. D. Stephens, P.R., Los Angeles.
11 Wm. Kettner, D., San Diego.

COLORADO
(At Large)
E. T. Taylor, D., Glenwood Springs.
Edw. Keating, D., Pueblo.
1 G. J. Kindel, D., Denver.
2 H. H. Seldombridge, D., Colorado Springs.

CONNECTICUT
1 Augustine Lonergan, D., Hartford.
2 B. F. Mahan, D., New London.
3 T. L. Riley, D., Meriden.
4 Jeremiah Donovan, D., So. Norwalk.
5 Wm. Kennedy, D., Naugatuck.

DELAWARE
(At Large)
Franklin Brockson, D., Clayton.

FLORIDA
(At Large)
Claude L'Engle, D., Jacksonville.
1 S. M. Sparkman, D., Tampa.
2 Frank Clark, D., Gainesville.
3 Emmett Wilson, D., Pensacola.

GEORGIA
1 C. G. Edwards, D., Savannah.
2 Frank Park D., Sylvester.
3 Charles R. Crisp, D., Americus.
4 W. C. Adamson, D., Carrollton.
5 W. S. Howard, D., Decatur.
6 C. L. Bartlett, D., Macon.
7 Gordon Lee, D., Chickamauga.
8 S. J. Tribble, D., Athens.
9 T. M. Bell, D., Gainesville.
10 T. W. Hardwick, D., Sandersville.
11 John R. Walker, D., Valdosta.
12 D. M. Hughes, D., Danville.

IDAHO
(At Large)
B. L. French, R., Moscow.
A. T. Smith, R., Twin Falls.

ILLINOIS
(At Large)
Lawrence B. Stringer, D., Lincoln.
W. E. Williams, D., Pittsfield.
1 M. B. Madden, R., Chicago.
2 J. R. Mann, R., Chicago.
3 Geo. E. Gorman, D., Chicago.
4 J. T. McDermott, D., Chicago.
5 A. J. Sabath, D., Chicago.
6 James McAndrews, D., Chicago
7 F. Buchanan, D., Chicago.

Dist. ILLINOIS—Cont'd
8 Thos. Gallagher, D., Chicago.
9 Fred. A. Britten, R., Chicago.
10 Chas. M. Thomson, P., Chicago.
11 Ira C. Copely, R., Aurora.
12 Wm. H. Hinebaugh, P., Ottowa.
13 J. C. McKenzie, R., Elizabeth.
14 C. H. Tavenner, D., Cordova.
15 S. A. Hoxworth, D., Repatee.
16 C. U. Stone, D., Peoria.
17 Louis Fitzhenry, D., Bloomington
18 Frank T. O'Hair, D., Paris.
19 C. M. Borchers, D., Decatur.
20 H. T. Rainey, D., Carrollton.
21 J. M. Graham, D., Springfield.
22 Wm. N. Baltz, D., Millstadt.
23 M. D. Foster, D., Olney.
24 H. R. Fowler, D., Elizabethtown.
25 Robt. P. Hill, D., Marion.

INDIANA
1 Chas. Lieb, D., Rockport.
2 W. A. Cullop, D., Vincennes.
3 W. E. Cox, D., Jasper.
4 Lincoln Dixon, D., North Vernon.
5 R. W. Moss, D., Center Point.
6 F. H. Gray, D., Connersville.
7 C. A. Korbly, D., Indianapolis.
8 J. A. M. Adair, D., Portland.
9 M. A. Morrison, D., Frankport.
10 John B. Peterson, D., Crown Point,
11 G. W. Rauch, D., Marion.
12 Cyrus Cline, D., Angola.
13 H. A. Barnhart, D., Rochester.

IOWA
1 C. A. Kennedy, R., Montrose.
2 I. S. Pepper, D., Muscatine.
3 Maurice Connolly, D., Dubuque.
4 G. N. Haugen, R., Northwood.
5 J. W. Good, R., Cedar Rapids.
6 Sanford Kirkpatrick, D., Ottumwa
7 S. F. Prouty, R., Des Moines.
8 H. M. Towner, R., Corning.
9 W. R. Green, R., Audubon.
10 F. P. Woods, R., Estherville.
11 Geo. C. Scott, R., Sioux City.

KANSAS
1 D. R. Anthony, Jr., R., Leavenworth.
2 Joseph Taggart, D., Kansas City.
3 Philip P. Campbell, R., Pittsburg.
4 Dudley Doolittle, D., Strong City.
5 Guy T. Helvering, D., Marysville.
6 John R. Connelly, D., Colby.
7 Geo. A. Neeley, D., Hutchinson.
8 Victor Murdock, P., Wichita.

KENTUCKY
1 A. W. Barkley, D., Paducah.
2 A. O. Stanley, D., Henderson.
3 R. Y. Thomas, Jr., D., Central City.
4 Ben Johnson, D., Bardstown.
5 Swagar Sherley, D., Louisville.
6 A. B. Rouse, D., Burlington.
7 J. C. Cantrill, D., Georgetown.
8 Harvey Helm, D., Stanford.
9 W. J. Fields, D., Olive Hill.
10 J. W. Langley, R., Pikeville.
11 Caleb Powers, R., Barbourville.

LOUISIANA
1 Albert Estopinal, D., Estopinal.
2 H. G. Dupré, D., New Orleans.
3 R. F. Broussard, D., New Iberia
4 J. T. Watkins, D., Minden.
5 Walter Elder, D., Monroe.
6 Lewis L. Morgan, D., Covington.
7 Ladislas Lazaro, D., Washington.
8 J. B. Aswell, D., Natchitoches.

MAINE
1 A. C. Hinds, R., Portland.
2 D. J. McGillicuddy, D., Lewiston.
3 John A. Peters, R., Ellsworth.
4 F. E. Guernsey, R., Dover.

MARYLAND
1 J. H. Covington, D., Easton.
2 J. F. C. Talbott, D., Lutherville.
3 Chas. P. Coady, D., Baltimore.

Dist. MARYLAND—Cont'd
4 J. C. Linthicum, D., Baltimore.
5 Frank O. Smith, D., Dunkirk.
6 D. J. Lewis, D., Cumberland.

MASSACHUSETTS
1 A. T. Treadway, R., Stockbridge.
2 F. H. Gillett, R., Springfield.
3 Calvin D. Paige, R., Southbridge.
4 S. E. Winslow, R., Worcester.
5 John J. Rogers, R., Lowell.
6 A. P. Gardner, R., Hamilton.
7 M. F. Phelan, D., Lynn.
8 F. S. Deitrick, D., Cambridge.
9 E. W. Roberts, R., Chelsea.
10 W. F. Murray, D., Boston.
11 A. J. Peters, D., Boston.
12 James M. Curley, D., Boston.
13 John J. Mitchell, D., Marlboro.
14 Edward Gilmore, D., Brockton.
15 Wm. S. Greene, R., Fall River.
16 T. C. Thacher, D., Yarmouth.

MICHIGAN
(At large)
P. H. Kelley, R., Lansing.
1 F. E. Doremus, D., Detroit.
2 S. W. Beakes, D., Ann Arbor.
3 J. M. C. Smith, R., Charlotte.
4 E. L. Hamilton, R., Niles.
5 Carl E. Mapes, R., Grand Rapids.
6 S. W. Smith, R., Pontiac.
7 Louis C. Cramton, R., Lapeer.
8 J. W. Fordney, R., Saginaw.
9 J. C. McLaughlin, R., Muskegon.
10 R. O. Woodruff, Nat'l P., Bay City
11 F. O. Lindquist, R., Greenville.
12 Wm. J. MacDonald, P.

MINNESOTA
(At Large)
James Manahan, R., Minneapolis.
1 S. Anderson, R., Lanesboro.
2 W. S. Hammond, D., St. James.
3 C. R. Davis, R., St. Peter.
4 F. C. Stevens, R., St. Paul.
5 Geo. R. Smith, R., Minneapolis.
6 C. A. Lindbergh, R., Little Falls.
7 A. J. Volstead, R., Granite Falls.
8 C. B. Miller, R., Duluth.
9 H. Steenerson, R., Cookston.

MISSISSIPPI
1 E. S. Candler, Jr., D., Corinth.
2 H. D. Stephens, D., N. Albany.
3 B. G. Humphreys, D., Greenville.
4 T. U. Sisson, D., Winona.
5 S. A. Witherspoon, D., Meridian.
6 B. P. Harrison, D., Gulfport.
7 P. E. Quin, D., McComb City.
8 J. W. Collier, D., Vicksburg.

MISSOURI
1 J. T. Lloyd, D., Shelbyville.
2 W. W. Rucker, D., Keytesville.
3 J. W. Alexander, D., Gallatin.
4 C. F. Booher, D., Savannah.
5 W. P. Borland, D., Kansas City.
6 C. C. Dickinson, D., Clinton.
7 C. W. Hamlin, D., Springfield.
8 D.W.Shackelford, D., Jefferson City
9 Champ Clark, D.,Bowling Green.
10 R. Bartholdt, R., St Louis.
11 Wm. L. Igoe, D., St. Louis.
12 L. C. Dyer, R., St. Louis.
13 W. L. Hensley, D., Farmington.
14 J. J. Russell, D., Charleston.
15 Perl D. Decker, D., Joplin.
16 T. L. Rubey, D., Lebanon.

MONTANA
(At Large)
John M. Evans, D., Missoula.
Tom Stout, D., Lewiston.

NEBRASKA
1 J. A. Maguire, D., Lincoln.
2 C. O. Lobeck, D., Omaha.
3 D. V. Stephens, D., Fremont.
4 C. H. Sloan, R., Geneva.
5 S. R. Barton, R., Grand Island.

HOUSE OF REPRESENTATIVES—Continued

Dist. NEBRASKA—Cont'd
6 M. P. Kinkaid, R., O'Neill.

NEVADA
(At Large)
E. E. Roberts, R., Carson City.

NEW HAMPSHIRE
1 E. E. Reed, D., Manchester.
2 R. B. Stevens, D., Landaff.

NEW JERSEY
1 W. J. Browning, R., Camden.
2 J. T. Baker, D., Wildwood.
3 T. J Scully, D., Perth Amboy.
4 Allan B. Walsh, D., Trenton.
5 W. E. Tuttle, Jr., D., Westfield.
6 Archibald C. Hart, D., Hackensack.
7 R. G. Bremner, D., Passaic.
8 E. F. Kinkead, D., Jersey City.
9 W. I. McCoy, D., East Orange.
10 E. W. Townsend, D., Montclair.
11 John J. Eagan, D., Weehawken.
12 James A. Hamill, D., Jersey City.

NEW MEXICO
(At Large)
H. B. Ferguson, D., Albuquerque.

NEW YORK
1 Lathrop Brown, D., St. James.
2 Denis O'Leary, D., Douglaston.
3 F. E. Wilson, D., Brooklyn.
4 H. H. Dale, D., Brooklyn.
5 Jas. P. Maher, D., Brooklyn.
6 W. M. Calder, R., Brooklyn.
7 J. J. Fitzgerald, D., Brooklyn.
8 Daniel J. Griffin, D., Brooklyn.
9 James H. O'Brien, D., Brooklyn.
10 Herman A. Metz, D., Brooklyn.
11 Daniel J. Riordan, D., New York.
12 Henry M. Goldfogle, D., New York.
13 Geo. W. Loft, D., New York.
14 J. M. Levy, D., New York.
15 Michael F. Conry, D., New York.
16 Peter J. Dooling, D., New York.
17 John F. Carew, D., New York.
18 T. G. Patten, D., New York.
19 W. M. Chandler, D., New York.
20 Jacob A. Cantor, D., New York.
21 Henry George, Jr., D., New York.
22 Henry Bruckner, D., New York.
23 Joseph A. Goulden, D., Fordham.
24 W. R. Oglesby, D., Yonkers.
25 B. I. Taylor, D., Harrison.
26 Edmund Platt, R., Poughkeepsie.
27 Geo. McClellan, D., Chatham.
28 P. G. TenEyck, D., Albany.
29 James S. Parker, R., Salem.
30 Samuel Wallin, R., Amsterdam.
31 E. A. Merritt, Jr., R., Potsdam.
32 L. W. Mott, R., Oswego.
33 Chas. A. Talcott, D., Utica.
34 Geo. Winthrop Fairchild, R., Oneonta.
35 John R. Clancy, D., Syracuse.
36 Sereno E. Payne, R., Auburn.
37 E. S. Underhill, D., Bath.
38 Thomas B. Dunn, R., Rochester.
39 H. G. Danforth, R., Rochester.
40 Robert H. Gittins, D., Niagara Falls.
41 Chas. B. Smith, D., Buffalo.
42 D. A. Driscoll, D., Buffalo.
43 C. M. Hamilton, R., Ripley.

NORTH CAROLINA
1 John H. Small, D., Washington.
2 Claude Kitchin, D., Scotland Neck.
3 J. M. Faison, D., Faison.
4 Edward W. Pou, D., Smithfield.
5 C. M. Stedman, D., Greensboro.
6 H. L. Godwin, D., Dunn.
7 Robert N. Page, D., Biscoe.
8 R. L. Doughton, D., Laurel Springs.
9 Edwin Y. Webb, D., Shelby.
10 J. M. Gudger, Jr., D., Asheville.

NORTH DAKOTA
1 Henry T. Helgesen, R., Milton.
2 Geo. M. Young, R., Valley City.
3 P. D. Norton, R., Hettinger.

Dist. OHIO
(At Large)
Robert Crosser, D., Cleveland.
1 Stanley E. Bowdle, D., Cincinnati.
2 A. G. Allen, D., Cincinnati.
3 Warren Gard, D., Hamilton.
4 J. H. Goecke, D., Wapakoneta.
5 T. T. Ansberry, D., Defiance.
6 S. D. Fess, R., Yellow Springs.
7 J. D. Post, D., Washington, C. H.
8 Frank B. Willis, R., Ada.
9 I. R. Sherwood, D., Toledo.
10 Robert M. Switzer, R., Gallipolis.
11 H. C. Claypool, D., Chillicothe.
12 Clement Brumbaugh, D., Columbia.
13 John A. Key, D., Marion.
14 W. G. Sharp, D., Elyria.
15 George White, D., Marietta.
16 W. B. Francis, D., Martins Ferry.
17 W. A. Ashbrook, D., Johnstown.
18 J. J. Whitacre, D., Canton.
19 E. R. Bathrick, D., Akron.
20 Wm. Gordon, D., Cleveland.
21 R. J. Bulkley, D., Cleveland.

OKLAHOMA
(At Large)
Wm. H. Murray, D., Tishomingo.
Joseph B. Thompson, D., Pauls Valley.
Claude Weaver, D., Oklahoma City.
1 B. S. McGuire, R., Pawnee.
2 D. T. Morgan, R., Woodward.
3 J. S. Davenport, D., Vinita.
4 C. D. Carter, D., Ardmore.
5 Scott Ferris, D., Lawton.

OREGON
1 W. C. Hawley, R., Salem.
2 N. J. Sinnott, R., The Dalles.
3 Walter Lafferty, P. R., Portland.

PENNSYLVANIA
(At Large)
Fred E. Lewis, R., Allentown.
John M. Morin, R., Pittsburgh.
Arthur R. Rupley, P. R., Carlisle.
A. H. Walters, R., Johnstown.
1 W. S. Vare, R., Philadelphia.
2 Geo. S. Graham, R., Philadelphia.
3 J. Hampton Moore, R., Philadelphia.
4 Geo. W. Edmonds, R., Philadelphia.
5 Michael Donohue, D., Philadelphia.
6 J. W. Logue, D., Philadelphia.
7 Thomas S. Butler, R., West Chester.
8 R. E. Difenderfer, D., Jenkintown.
9 W. W. Griest, R., Lancaster.
10 John R. Farr, R., Scranton.
11 John J. Casey, D., Wilkes-Barre.
12 R. E. Lee, D., Posttville.
13 J. H. Rothermel, D., Reading.
14 W. D. B. Ainey, R., Montrose.
15 Edgar R. Kiess, R., Williamsport.
16 John V. Lesher, D., Sunbury.
17 F. L. Dershan, D., Lewisburg.
18 Aaron S. Kreider, R., Annville.
19 W. W. Bailey, D., Johnstown.
20 Andrew R. Brodbeck, D., Hanover.
21 C. E. Patton, R., Curwensville.
22 A. L. Keister, R., Scottdale.
23 W. N. Carr, D., Uniontown.
24 H. W. Temple, P., Washington.
25 M. W. Shreve, R., Erie.
26 A. M. Palmer, D., Stroudsburg.
27 J. N. Langham, R., Indiana.
28 W. J. Hulings, P., Oil City.
29 S. G. Porter, R., Pittsburgh.
30 M. C. Kelly, R., Braddock.
31 J. F. Burke, R., Pittsburgh.
32 A. J. Barchfield, R., Pittsburgh.

RHODE ISLAND
1 G. F. O'Shaunessy, D., Providence.
2 P. G. Gerry, D., Providence.
3 Ambrose Kennedy, R., Woonsocket.

SOUTH CAROLINA
1 Richard S. Whaley, D., Charleston.
2 James F. Byrnes, D., Aiken.
3 Wyatt Aiken, D., Abbeville.

Dist. SOUTH CAROLINA—Cont'd
4 J. T. Johnson, D., Spartanburg.
5 D. E. Finley, D., Yorkville.
6 J. W. Ragsdale, D., Florence.
7 A. F. Lever, D., Lexington.

SOUTH DAKOTA
1 C. H. Dillon, R., Yankton.
2 C. H. Burke, R., Pierre.
3 E. W. Martin, R., Deadwood.

TENNESSEE
1 Samuel R. Sells, R., Johnson City.
2 R. W. Austin, R., Knoxville.
3 John A. Moon, D., Chattanooga.
4 Cordell Hull, D., Carthage.
5 W. C. Houston, D., Woodbury.
6 Joseph W. Byrns, D., Nashville.
7 L. P. Padgett, D., Columbia.
8 Thetus W. Sims, D., Linden.
9 Finis J. Garrett, D., Dresden.
10 Kenneth D. McKellar, D., Memphis.

TEXAS (At Large)*
Daniel E. Garrett, D., Houston.*
H. W. Summers, D., Dallas.*
1 H. W. Vaughn, D., Texarkana.
2 Martin Dies, D., Beaumont.
3 James Young, D., Kaufman.
4 Sam Rayburn, D., Bonham.
5 Jack Beall, D., Waxahachie.
6 Rufus Hardy, D., Corsicana.
7 A. W. Gregg, D., Palestine.
8 Joe H. Eagle, D., Houston.
9 George F. Burgess, D., Gonzales.
10 John P. Buchanan, D., Brenham.
11 Robert L. Henry, D., Waco.
12 Oscar Callaway, D., Comanche.
13 John H. Stephens, D., Vernon.
14 James L. Slayden, D., San Antonio.
15 John N. Garner, D., Uvalde.
16 W. R. Smith, D., Colorado.

UTAH (At Large)
Jos. Howell, R., Logan.
Jacob Johnson, R., Spring City.

VERMONT
1 Frank L. Greene, R., St. Albans.
2 Frank H. Plumley, R., Northfield.

VIRGINIA
1 William A. Jones, D., Warsaw.
2 E. E. Holland, D., Suffolk.
3 A. J. Montague, D., Richmond City.
4 W. A. Watson, D., Jennings Ordinary.
5 E. W. Saunders, D., Rocky Mount
6 Carter Glass, D., Lynchburg.
7 James Hay, D., Madison.
8 C. C. Carlin, D., Alexandria.
9 C. Bascom Slemp, R., Big Stone Gap.
10 Henry D. Flood, D., Appomatox.

WASHINGTON
James W. Bryan P., Seattle (At Large).
J. A. Falconer, P., Everett (At Large).
1 W. E. Humphrey, R., Seattle.
2 Albert Johnson, R., Hoquiam.
3 Wm. L. LaFollette, R., Pullman.

WEST VIRGINIA
(At Large)
Howard Sutherland, R., Elkins.
1 M. M. Neely, D. Fairmont.
2 W. G. Brown, D., Kingwood.
3 S. B. Avis, R., Charleston.
4 H. H. Moss, Jr., R., Parkersburg.
5 James A. Hughes, R., Huntington.

WISCONSIN
1 H. A. Cooper, R., Racine.
2 M. E. Burke, D., Beaver Dam.
3 John M. Nelson, R., Madison.
4 Wm. J. Cary, R., Milwaukee.
5 W. H. Stafford, R., Milwaukee.
6 M. K. Reilly, D., Fond du Lac.
7 John J. Esch, R., La Crosse.
8 E. E. Browne, R., Waupaca.
9 T. F. Konop, D., Kewaunee.
10 James A. Frear, R., Hudson.
11 I. L. Lenroot, R., Superior.

WYOMING (At Large)
Frank W. Mondell, R., Newcastle.

POSTAL REGULATIONS

DOMESTIC POSTAGE

(Domestic postage applies to any mail matter between points in the United States or its possessions.)

First Class Matter (Letters, etc.) .....2c. an ounce
Postal Cards.....1c. each
Post Cards (Private Mailing Cards).....1c. each
Transient Second Class (Newspapers, Periodicals).....
.....1c. for 4 ounces
Third Class (Books, Circulars).....1c. for 2 ounces
Fourth Class (Merchandise) (See Parcel Post).....
..... Special rate determined by zones
Registration Fee (in addition to postage).....10c.
Special Delivery Stamp (addition to postage).....10c.

First Class Matter—Letters and all other written matter (whether sealed or not), excepting manuscript copy accompanying proof-sheets, also all matter sealed, two cents an ounce, excepting drop letters at non-carrier offices, one cent an ounce. Postal cards, one cent each. Post cards (private mailing cards), one cent each. Limit of weight 4 lbs.

Second Class—Newspapers and periodicals, in their entirety, published quarterly and oftener, bearing notice of entry as second-class matter, the general public pay by affixing stamps at the rate of one cent for each four ounces or part thereof when not sealed. No limit of weight.

Third Class—Books (printed, not blank), circulars, other printed matter, proof-sheets and manuscript copy accompanying the same, valentines, sheet music, photographs, chromos, posters, lithographs, mimeographs and printed advertising matter on paper only—all, when not sealed, one cent for two ounces or fraction. Printed matter mailed in quantities should be properly classified at the post-office to ascertain whether it is mailable as parcel post. Limit of weight, four pounds, except single books.

Fourth Class—See Parcels Post Regulations.

Registration—Any class of mailable matter may be registered except fourth class matter in the domestic mails (which can be insured, fee 10c.) and parcel-post packages for certain foreign countries. First class mail may be registered by city carriers at the house door. Fee 10 cents. Indemnity for value up to $50 is paid for the loss of sealed domestic matter prepaid at the letter rate of postage, and for value up to $25 on 3rd class matter; and for value up to 50 francs (or its equivalent in United States money) for loss of registered articles addressed to foreign countries embraced in the Universal Postal Union.

Forwarding—All first class matter may be forwarded until it reaches the addressee. All other classes require another prepayment.

Not Mailable—Un-prepaid matter of second, third and fourth class; all matter harmful in its nature, poisonous, explosive, or obscene; post cards bearing any particles of mica or tinsel; all matter concerning any lottery, or for the purpose of obtaining any money under false pretenses.

To Canada, Cuba, Panama, and Mexico.

Mail matter of all kinds addressed for delivery in Canada, Cuba, Panama, and Mexico is admitted to the mails at domestic postage rates and conditions, except commercial papers and bona fide trade samples, which are admitted at a rate of two ounces for one cent, if not weighing over twelve ounces. Seeds, bulbs, scions, and plants for Canada must be prepaid at the rate of one cent per ounce or fraction of an ounce. Packages of merchandise for Canada and Cuba, weight not exceeding 4 lbs. 6 oz. can be sent unsealed at 12c. per pound or fraction of a pound. Merchandise for Panama and Mexico can be sent by Universal Parcel-post accompanied by a customs declaration. (See foreign parcel-post regulations). Cannot be insured, may be registered, fee ten cents.

FOREIGN POSTAGE

The rates in the case of all foreign countries (except Canada, Cuba, Panama, and Mexico) are as follows: Letters, first ounce or less, 5 cents; each additional ounce or fraction, 3 cents; postal cards, 2 cents; newspapers and printed matter, per 2 ounces, 1 cent; samples of merchandise, first 4 ounces or less, 2 cents; each additional ounce or fraction, 1 cent (limit of weight, 12 ounces). Registration fee, 10 cents.

Letters for England, Ireland, Scotland, Wales, and Newfoundland, per ounce, 2 cents, and letters for Germany by steamers sailing for Germany direct, per ounce, 2 cents.

DOMESTIC MONEY ORDERS

Fees for Money Orders payable in the United States (which includes Hawaii and Porto Rico) and its possessions comprising the Canal Zone (Isthmus of Panama), Guam, the Philippines, and Tutuila, Samoa; also for orders payable in Bahamas, Bermuda, British Guiana, British Honduras, Canada, Cuba, Mexico, Newfoundland, at the United States postal agency at Shanghai (China), and in certain islands in the West Indies.

Not over $2.50..... 3c.	Over $30 to $40.....15c.
Over $2.50 to $5..... 5c.	Over $40 to $50.....18c.
Over $5 to $10..... 8c.	Over $50 to $60.....20c.
Over $10 to $20.....10c.	Over $60 to $75.....25c.
Over $20 to $30.....12c.	Over $75 to $100.....30c.

INTERNATIONAL MONEY ORDERS

When payable in Apia, Austria, Belgium, Bolivia, Cape Colony, Costa Rica, Denmark, Egypt, Germany, Great Britain and Ireland, Honduras, Hongkong, Hungary, Italy, Japan, Liberia, Luxemburg, Natal and Zululand, New South Wales, New Zealand, Orange River Colony, Peru, Portugal, Queensland, Russia, Salvador, South Australia, Switzerland, Tasmania, The Transvaal, Uruguay and Victoria.

From $00.01 to $ 2.50...10c.	From $30.01 to $ 40.....45c.
From $ 2.51 to $ 5.....15c.	From $40.01 to $ 50.....50c.
From $ 5.01 to $ 7.50...20c.	From $50.01 to $ 60.....60c.
From $ 7.51 to $10.....25c.	From $60.01 to $ 70.....70c.
From $10.01 to $15.....30c.	From $70.01 to $ 80.....80c.
From $15.01 to $20.....35c.	From $80.01 to $ 90.....90c.
From $20.01 to $30.....40c.	From $90.01 to $100..... $1.

When payable in Algeria, France, Chili, Greece, Netherlands, Norway and Sweden:

From $00.01 to $10.....10c.	From $50.01 to $ 60.....60c
From $10.01 to $20.....20c.	From $60.01 to $ 70.....70c.
From $20.01 to $30.....30c.	From $70.01 to $ 80.....80c.
From $30.01 to $40.....40c.	From $80.01 to $ 90.....90c.
From $40.01 to $50.....50c.	From $90.01 to $100..... $1.

FOREIGN PARCELS POST MAILS

Admissible Matter—Packages of mailable merchandise may be sent, in unsealed packages by "Parcels Post" to these countries: Australia, Austria, Bahamas, Barbados, Brazil Belgium, Bermuda, Bolivia, British Guiana, British Honduras, Chile, Colombia, Costa Rica, Danish West Indies, Denmark, Dominican Republic, Dutch Guiana, Dutch West Indies, Ecuador, France, Germany, Great Britain, Guatemala, Honduras (British), Honduras (Republic of), Hongkong, Italy, Jamaica, Japan, Leeward Islands, Manchuria, Mexico, Netherlands, New Zealand, Newfoundland, Nicaragua, Norway, Panama (Republic of) Peru, Sweden, Salvador, Trinidad (including Tobago), Turks Island, Uruguay, Venezuela, Windward Islands, parts of Africa, China and Turkey.

Postage Rates—Postage must be prepaid in full by stamps affixed at the rate of 12 cents a pound or fraction of a pound. Registry fee 10 cents in addition to postage.

Registration—The sender of a parcel addressed to any of the above named foreign countries, except Barbados, Curacao (including Aruba, Bonaire, Saba, St. Eustains, and the Dutch part of St. Martins), France, French West Indies, Martinique, Guadeloupe, Marie Galante, Deseade, Le Saints, St. Bartholomew and the French portion of St. Martins, Great Britain, The Netherlands, Uruguay, and Dutch Guiana, may have the same registered by paying a registry fee of 10 cents, and will receive the "Return Receipt" without special charge therefor, when envelope or wrapper is marked "Return Receipt Demanded."

Place of Mailing—Matter intended for Parcels Post must be taken to the general post-office or a carrier delivery station and presented to the person in charge, for inspection.

Not Mailable—A letter or communication of the nature of personal correspondence must not accompany, be written on, or inclosed with, any parcel.

FOURTH CLASS OR DOMESTIC PARCELS POST

LOCAL, FIRST AND SECOND ZONE RATES

Weight	Local Rate	1st and 2nd Zone Rate	Weight	Local Rate	1st and 2nd Zone Rate	Weight	Local Rate	1st and 2nd Zone Rate
1 lb.	$0.05	$0.05	18 lb.	$0.14	$0.22	35 lb.	$0.22	$0.39
2 lb.	.06	06	19 lb.	.14	.23	36 lb.	.23	.40
3 lb.	.06	.07	20 lb.	.15	.24	37 lb.	.23	.41
4 lb.	.07	.08	21 lb.	15	.25	38 lb.	.24	.42
5 lb.	.07	.09	22 lb.	.16	.26	39 lb.	.24	.43
6 lb.	.08	.10	23 lb.	.16	.27	40 lb.	.25	.44
7 lb.	.08	.11	24 lb.	.17	.28	41 lb.	.25	.45
8 lb.	.09	.12	25 lb.	.17	.29	42 lb.	.26	.46
9 lb.	.09	.13	26 lb.	.18	.30	43 lb.	.26	.47
10 lb.	.10	.14	27 lb.	.18	.31	44 lb.	.27	.48
11 lb.	.10	.15	28 lb.	.19	.32	45 lb.	.27	.49
12 lb.	.11	.16	29 lb.	.19	.33	46 lb.	.28	.50
13 lb.	.11	.17	30 lb.	.20	.34	47 lb.	.28	.51
14 lb.	.12	.18	31 lb.	.20	.35	48 lb.	.29	.52
15 lb.	.12	.19	32 lb.	.21	.36	49 lb.	.29	.53
16 lb.	.13	.20	33 lb.	.21	.37	50 lb.	.30	.54
17 lb.	.13	.21	34 lb.	.22	.38			

RATES IN THIRD TO EIGHTH ZONES

Weight	3d zone rate 150-300 miles	4th zone rate 300-600 miles	5th zone rate 600-1000 miles	6th zone rate 1000-1400 miles	7th zone rate 1400-1800 miles	8th zone rate All over 1800 miles
1 lb.	$0.06	$0 07	$0.08	$0.09	$0.11	$0.12
2 lb.	08	.11	.14	.17	.21	.24
3 lb.	.10	.15	.20	.25	.31	.36
4 lb.	.12	.19	.26	.33	.41	.48
5 lb.	.14	.23	.32	.41	.51	.60
6 lb.	.16	.27	.38	.49	.61	.72
7 lb.	.18	.31	.44	.57	.71	.84
8 lb.	.20	.35	.50	.65	.81	.96
9 lb.	.22	.39	.56	.73	.91	1.08
10 lb.	.24	.43	.62	.81	1.01	1.20
11 lb.	.26	.47	.68	.89	1.11	1.32
12 lb.	.28	.51	.74	.97	1.21	1.44
13 lb.	.30	.55	.80	1.05	1.31	1.56
14 lb.	.32	.59	.86	1.13	1.41	1.68
15 lb.	.34	.63	.92	1.21	1.51	1.80
16 lb.	.36	.67	.98	1.29	1.61	1.92
17 lb.	.38	.71	1.04	1.37	1.71	2.04
18 lb.	.40	.75	1.10	1.45	1.81	2.16
19 lb.	.42	.79	1.16	1.53	1.91	2.28
20 lb.	.44	.83	1.22	1.61	2.01	2.40

Parcels may be sent C. O. D. (collect on delivery) for any amount up to $100. for a fee of ten cents in addition to regular parcel post rates.

Parcels may be insured for an amount not to exceed $25.00 for a fee of five cents, or for amounts over $25.00 and not to exceed $50.00 for a fee of ten cents, either fee to be added to regular postage.

On and after March 16th, 1914, the rate of postage on books weighing 8 ounces or less will be 1 cent for each 2 ounces or fraction thereof and on those weighing in excess of 8 ounces the regular zone rate will apply.

POSTAL SAVINGS BANK SYSTEM

The Purpose—To provide facilities for depositing savings at interest with the security of the government.

Who may be Depositors—Any individual over 10 years of age—not a corporation, society or firm. A married woman in her own name without interference from her husband. Only one account allowed to each person. Accounts must be opened in person or by an authorized agent, but subsequent deposits may be sent by mail. A depositor's account is protected from publicity.

To Open an Account—Deposits will be received in the form of either Postal Savings Cards properly completed to the amount of $1, or cash not to exceed $100, during any one month, or a total not to exceed $500 for any one account. Deposits are evidenced by postal savings certificates issued in denominations of $1, $2, $5, $10, $20, $50 and $100. Duplicates of each certificate issued are retained by the postmaster, so that a depositor losing his certificate may obtain a duplicate. No account may be opened for less than $1 (see Savings Stamps). Savings certificates cannot be transferred and will be payable only to the person to whom issued. On opening an account a depositor is supplied with an envelope in which he may keep his savings certificates. On this envelope is printed information for his guidance, and also a blank ledger record on which to keep an account of his deposits and withdrawals.

Savings Stamps—Valued at ten cents each are sold at stamp windows of all carrier stations and general post-offices. When nine of these are collected and pasted on a card for the purpose costing ten cents it may be deposited in lieu of $1.00.

Two Percent Interest—Payable annually, computed on each savings certificate separately. No interest will be paid on money which remains on deposit for a fraction of a year only. Deposits will bear interest from the first of the month next following that in which deposited. Interest will continue to accrue on a savings certificate as long as it remains outstanding, certificates being valid until paid, without limitation as to time. Compound interest is not allowed on an outstanding certificate, but a depositor may withdraw interest payable and include it in a new deposit, which will bear interest at the regular rate.

Postal Savings Bonds—A depositor will be permitted to exchange any part of his deposit in sums of $20, $100, or $500, into United States registered or coupon bonds bearing interest at the rate of 2½ per cent. per annum, payable semi-annually, and redeemable at the pleasure of the United States after one year from date of issue, both principal and interest payable 20 years from such date in United States gold coin. Such exchange may be made under date of January 1 and July 1 of each year, provided such bonds are then available. Application for such bonds must be made at least 15 days before either of the given dates to the postmaster.

On application the Board of Trustees will purchase postal-savings bonds at par.

POSTAL STATISTICS

Year ended June 30—	Post-offices	Extent of post routes	Revenue of the department	Expended for transportation of—		Total expenditure of the department
				Domestic mail	Foreign mail	
	Number	*Miles*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
1900	76,688	500,990	102,354,579	54,135,930	2,100,266	107,740,268
1905	68,131	486,805	152,826,485	69,927,689	2,828,703	167,399,169
1906	65,600	478,711	167,932,782	72,944,352	2,895,756	178,449,779
1907	62,659	463,406	183,585,006	77,471,917	2,988,849	190,238,288
1908	61,158	450,738	191,478,663	78,174,988	2,982,732	208,351,886
1909	60,144	448,618	203,562,383	80,901,899	2,804,170	221,004,102
1910	59,580	447,998	224,128,637	81,709,433	3,164,254	229,977,224
1911	59,239	435,388	237,879,323	84,854,323	3,204,599	237,648,926
1912	58,729	436,469	245,744,015	85,970,061	3,185,725	248,525,450

POSTAL STATISTICS (Continued)

Year ended June 30—	Postal cards issued	Ordinary postage stamps issued	Matter of all kinds mailed (estimated)	Paid as compensation of postmasters	City delivery offices	City Carriers	Rural delivery	
							Carriers	Mileage
1900	587,815,250	3,998,544,564	7,129,990,202	$19,112,097	796	15,322	1,276	28,685
1905	728,285,100	5,751,017,915	10,187,505,889	22,743,342	1,144	21,778	32,055	721,237
1906	798,917,850	6,284,450,495	11,361,090,610	23,544,585	1,184	22,965	35,666	820,318
1907	805,568,700	7,061,036,615	12,255,666,367	24,575,696	1,240	24,577	37,582	883,117
1908	809,426,750	7,651,400,405	13,173,340,329	25,599,397	1,330	26,352	39,143	891,432
1909	926,478,900	8,731,875,393	14,004,577,271	26,569,892	1,440	27,620	40,499	979,541
1910	726,441,000	9,067,164,886	14,850,102,559	27,521,040	1,492	28,715	40,977	993,068
1911	975,138,748	10,046,068,728	16,900,552,138	28,284,964	1,541	29,168	41,559	1,015,023
1912	909,411,045	9,928,263,748	17,588,658,941	28,647,726	1,621	29,962	42,199	1,021,492

The number of money order offices now in operation is 52,815. These offices issued 84,539,212 money orders during the fiscal year ending June 30, 1912.

The rural free delivery service was established on Oct. 1, 1896, simultaneously on three routes from Charleston, Uvilla and Halltown, W. Va. The regular service commenced the following year with 83 routes.

INTERNAL REVENUE OF THE UNITED STATES —1912-1913

Collections of internal revenue, from all sources, for the fiscal year 1912–13 total $344,424,453, exceeding all predecessors, not even excepting the years of the Spanish war, when, by reason of the special war impost, there was a tremendous acceleration of the collection of Federal funds. The gain in internal revenue, including the corporation tax, for 1912–13 over 1911–12 was $22,808,559. The collections even exceed the record-breaking year of 1910–11. The excess over that year was $21,898,154.

The following is the segregation of internal revenue receipts as reported by the commissioner of internal revenue:

Ordinary collections: 1913, $309,418,154; 1912, $293,032,634; increase, $16,385,519.

Corporation excise tax collections: 1913, $35,000,299; 1912, $28,583,259; increase, $6,423,040.03.

Aggregate collections: 1913, $344,424,453; 1912, $321,615,694; increase, $22,808,559.

Besides the foregoing tabulation of totals there are to be noted the following principal items of increase:

Distilled spirits, $7,487,854.77; manufactured tobacco, including cigars, cigarettes and snuff, $6,199,223.15; fermented liquors, $2,998,219.09; special excise tax on corporations, $6,423,040.03.

Analysis of the figures on spirituous and fermented liquors and upon tobacco, cigars and cigarettes discloses the fact that the tax collected on whisky was $7,744,914.49 greater for 1912–13 than for the year before. This is an increase of approximately 5 per cent. Vinous spirits, brandies of every sort including applejack, paid $387,679.19, almost 15 per cent. gain. Beers, according to this report paid $3,136,911.01 increase of tax.

There is noted a falling off in the special tax to wholesalers and retailers of all sorts of intoxicants, which in view of the fact that this tax is inelastic would indicate a reduction in the number of groggeries, and "barrel houses" throughout the United States. The figures of this decrease are not so segregated as to show these decreases by states. However, collections of the special tax from retail liquor dealers fall off $532,217.89 and from wholesalers $85,203.72. There is a decrease of $42,656.80 of income from the retail beer licenses and $79,526.81 from the wholesale source.

There is an increase of more than 6 per cent. in the revenue collected from the manufacturers of the larger grades of cigars, these weighing more than three pounds to the 1,000, while panetellas and stogies apparently are losing popularity, showing a 5 per cent. decrease. The revenue figures are:

From cigars weighing more than 3 lbs. per 1,000, $1,327,941.72 increase; from cigars weighing less than 3 lbs. per 1,000, $44,962.98 decrease.

Cigarettes are outstripping cigars in public popularity at an amazing rate. The revenue from the paper shelled puffs increased for the year just ended more than 26½ per cent.

Collections on cigarettes for 1912–13 were $17,845,963.95. The year before they were but $14,027,031.33.

Chewing tobacco and smoking tobacco are classed together in revenue collections so that an analysis of the alleged decrease in the amount of plug mastication is not obtainable. However, the increased revenue from both these classes of tobacco was only about 2⅝ per cent. or $846,197.88.

WORLD'S TWENTY-ONE GREATEST MEN AS SELECTED BY ANDREW CARNEGIE

Arkwright, Sir Richard—Inventor of the cotton spinning machine.
Bell, Dr. Alexander Graham—Inventor of the telephone.
Bessemer, Sir Henry—Inventor of the steel process that bears his name.
Burns, Robert—The Scotch poet.
Columbus, Christopher—The discoverer.
Edison, Thomas Alva—The electrician.
Franklin, Benjamin—The electrical pioneer.
Gutenberg, Johannes—The inventor of the printing press.
Hargreaves, James—Inventor of the carding machine and the spinning jenny.
Jenner, Dr. Edward—Discoverer of smallpox vaccine.
Kay, John—Inventor of the fly shuttle and the card-making engine.
Lincoln, Abraham—Abolished Slavery.
Morton, Dr. William Thomas Green—Discoverer of the anæsthetic properties of ether.
Murdock, William—Perfected coal gas for illuminating purposes.
Mushet, Robert—Inventions used in the manufacture of steel.
Neilson, James Beaumont—The inventor of the hot blast used in the manufacture of iron.
Shakespeare, William—Playwright.
Siemens, Sir William—Inventions used in the manufacture of steel.
Stephenson, George—Founder of railways.
Symington, William—Inventor of the steamboat.
Watt, James—Development of the steam engine.

Presidents Elected by Minority Vote

Out of the twenty-three successful candidates for the Presidency since 1820, only twelve received a popular majority.

From 1820 forward the candidates who won a majority of the electoral votes on a minority of the popular votes were as follows:

	Per Cent. of Popular Vote
1824—John Quincy Adams	30
1844—James K. Polk	50
1848—Zachary Taylor	46
1856—James Buchanan	45
1860—Abraham Lincoln	40
1876—Rutherford B. Hayes	48
1880—James A. Garfield	48
1884—Grover Cleveland	49
1888—Benjamin Harrison	47
1892—Grover Cleveland	46
1912—Woodrow Wilson	48

STATE FACTS

HIGHEST MEASURED ALTITUDE IN EACH STATE

State and Point	Feet	State and Point	Feet
Alabama, Cheawha mountain	2,407	Montana, Granite peak	12,834
Alaska, Mount McKinley	20,300	Nebraska, plains in southwestern corner	5,300
Arizona, San Francisco peak	12,611	Nevada, Wheeler peak	13,058
Arkansas, Magazine mountain	2,800	New Hampshire, Mount Washington	6,293
California, Mount Whitney	14,501	New Jersey, High Point	1,800
Colorado, Mount Elbert	14,421	New Mexico, peak near Truchas peak	13,306
Connecticut, Bear mountain	2,355	New York, Mount Marcy	5,344
Delaware, near Brandywine	440	North Carolina, Mount Mitchell,	6,711
District of Columbia, Fort Reno	421	North Dakota, south part of Bowman county	3,500
Florida, near Mount Pleasant station	301	Ohio, 1¼ miles east of Bellefontaine	1,540
Georgia, Brasstown Bald mountain	4,768	Oklahoma, south of Kenton	4,700
Idaho, Hyndman peak	12,078	Oregon, Mount Hood	11,225
Illinois, Charles mound, Jo Daviess county	1,241	Pennsylvania, Blue Knob	3,136
Indiana, Carlos City	1,285	Rhode Island, Durfee hill	805
Iowa, five miles southeast of Sibley	1,670	South Carolina, Sassafras mountain	3,548
Kansas, west boundary no. of Arkansas river	4,135	South Dakota, Harney peak	7,244
Kentucky, The Double, Harlem county	4,100	Tennessee, Mount Guyot	6,636
Louisiana, summits in western parishes	400	Texas, El Capitan, Guadalupe mountain	8,690
Maine, Mount Katahdin (west)	5,268	Utah, Kings Peak	13,498
Maryland, Backbone mountain	3,400	Vermont, Mount Mansfield	4,364
Massachusetts, Mount Greylock	3,535	Virginia, Mount Rogers	5,719
Michigan, Porcupine mountain	2,023	Washington, Mount Rainier	14,470
Minnesota, Misquah hills, Cook county	2,400	West Virginia, Spruce Knob	4,860
Mississippi, near Holly Springs	602	Wisconsin, Rib hill, Marathon county	1,940
Missouri, Tom Sauk mountain	1,800	Wyoming, Mount Gannett	13,785

STATE NICKNAMES AND FLOWERS

State	Nickname	Flower
Alabama	Cotton state	Goldenrod
Arizona		Sequoia cactus
Arkansas	Bear state	Apple blossom
California	Golden state	Poppy
Colorado	Centennial state	Columbine
Delaware	Blue Hen state	Peach blossom
Florida	Peninsula state	
Georgia	Cracker state	Cherokee rose
Idaho		Syringa
Illinois	Sucker state	Violet
Indiana	Hoosier state	
Iowa	Hawkeye state	Wild rose
Kansas	Sunflower state	Sunflower.
Kentucky	Blue Grass state	
Louisiana	Pelican state	Magnolia
Maine	Pine Tree state	Pine cone
Maryland	Old Line state	
Massachusetts	Bay state	
Michigan	Wolverine state	Apple blossom
Minnesota	Gopher state	Moccasin
Mississippi	Bayou state	Magnolia
Montana	Stub Toe state	Bitter root
Missouri		Goldenrod
Nebraska		Goldenrod
Nevada	Silver state	
New Hampshire	Granite state	
New Jersey	Jersey Blue state	Sugar maple (tree)
New York	Empire state	Rose
North Carolina	Old North state	
North Dakota	Flickertail state	Goldenrod
Ohio	Buckeye state	
Oklahoma		Mistletoe
Oregon	Beaver state	Oregon grape
Pennsylvania	Keystone state	
Rhode Island	Little Rhody	Violet
South Carolina	Palmetto state	
South Dakota	Swiage Cat state	
Tennessee	Big Bend state	
Texas	Lone Star state	Bluebonnet
Utah		Sego lily
Vermont	Green Mountain state	Red clover
Virginia	The Old Dominion	
Washington	Chinook state	Rhododendron
West Virginia	The Panhandle	
Wisconsin	Badger state	

FORMS OF CAPITAL PUNISHMENT IN UNITED STATES

Alabama	Hanging	Mississippi	Hanging
Arizona	Hanging	Missouri	Hanging
Arkansas	Hanging	Montana	Hanging
California	Hanging	Nebraska	Hanging
Colorado	Hanging	Nevada	Option—Shooting or hanging
Connecticut	Hanging	New Hampshire	Hanging (or Life Imprisonment)
Delaware	Hanging	New Jersey	Electrocution
Dist. of Columbia	Hanging	New Mexico	Hanging
Florida	Hanging	New York	Electrocution
Georgia	Hanging	N. Carolina	Electrocution
Idaho	Hanging	N. Dakota	Hanging
Illinois	Hanging	Ohio	None
Indiana	Hanging	Oklahoma	Hanging
Iowa	Hanging	Oregon	Hanging
Kansas	(Life Imprisonment)	Pennsylvania	Hanging
Kentucky	Electrocution	Rhode Island	None
Louisiana	Hanging	South Carolina	Hanging
Maine	None	South Dakota	Hanging
Maryland	Hanging	Tennessee	Hanging
Massachusetts	Electrocution	Texas	Hanging
Michigan	(Life Imprisonment)	Utah	Option—Shooting or hanging
Minnesota	(Life Imprisonment)	Vermont	Electrocution
		Virginia	Electrocution
		Washington	Imprisonment
		West Virginia	Hanging
		Wisconsin	
		Wyoming	Hanging

THE CONSCIENCE FUND

There is in reality no such distinct account as the "Conscience Fund" in the United States Treasury. Conscience money is immediately turned into the general fund and expended the same as any other receipt. Conscience money sent to the Federal Treasury during the fiscal year of 1913 amounted to $2,814.44. Several hundred people contributed. The identity of all is unknown. The amount makes an aggregate of $434,615.69, thus paid into the Treasury.

Conscience contributions range from a few cents to thousands of dollars. The fund was established in President Madison's administration in 1811, when the first contribution of $5 was received. The largest amount ever received in one year was $35,868 in 1902, and the greatest individual contribution $18,669.60, was made to the Collector of Customs in New York more than a decade ago by an unknown.

DATA OF STATES

State	Admitted to the Union	Area. Sq. M.	Rep. Cong.†	Elec. vote.†
Alabama	Dec. 14, 1819	52,250	10	12
Arizona	Feb. 14, 1912	113,020	1	3
Arkansas	June 15, 1836	53,850	7	9
California	Sept. 9, 1850	158,360	11	13
Colorado	Aug. 1, 1876	103,925	4	6
Connecticut	*Jan. 9, 1788	4,990	5	7
Delaware	*Dec. 7, 1787	2,050	1	3
Florida	March 3, 1845	58,680	4	6
Georgia	*Jan. 2, 1788	59,475	12	14
Idaho	July 3, 1890	84,800	2	4
Illinois	Dec. 3, 1818	56,650	27	29
Indiana	Dec. 11, 1816	36,350	13	15
Iowa	March 3, 1845	56,025	11	13
Kansas	Jan. 29, 1861	82,080	8	10
Kentucky	Feb. 4, 1792	40,400	11	13
Louisiana	April 8, 1812	48,720	8	10
Maine	March 3, 1820	33,040	4	6
Maryland	*April 28, 1788	12,210	6	8
Massachusetts	*Feb. 6, 1788	8,315	16	18
Michigan	Jan. 26, 1837	58,915	13	15
Minnesota	May 11, 1858	83,365	10	12
Mississippi	Dec. 10, 1817	46,810	8	10
Missouri	March 2, 1821	69,415	16	18
Montana	Nov. 8, 1889	146,080	2	4
Nebraska	March 1, 1867	77,510	6	8
Nevada	Oct. 31, 1864	110,700	1	3
New Hampshire	*June 21, 1788	9,305	2	4
New Jersey	*Dec. 18, 1787	7,815	12	14
New Mexico	Jan. 6, 1912	122,580	1	3
New York	*July 26, 1788	49,170	43	45
North Carolina	*May 23, 1785	52,250	10	12
North Dakota	Nov. 2, 1889	70,795	3	5
Ohio	Nov. 29, 1802	41,060	22	24
Oklahoma	Nov. 16, 1907	70,430	8	10
Oregon	Feb. 14, 1859	96,030	3	5
Pennsylvania	*Dec. 12, 1787	45,215	36	38
Rhode Island	*May 29, 1790	1,250	3	5
South Carolina	*May 23, 1788	30,570	7	9
South Dakota	Nov. 2, 1889	77,650	3	5
Tennessee	June 1, 1796	42,050	10	12
Texas	Dec. 29, 1845	265,780	18	20
Utah	Jan. 4, 1896	84,970	2	4
Vermont	Feb. 18, 1791	9,565	2	4
Virginia	*June 26, 1788	42,450	10	12
Washington	Nov. 11, 1889	69,180	5	7
West Virginia	Dec. 31, 1862	24,780	6	8
Wisconsin	May 29, 1848	56,040	11	13
Wyoming	July 11, 1890	97,890	1	3

*Ratified the Constitution †according to Reapportionment act approved Aug. 8, 1911.

GOVERNORS OF STATES

State	Governor	Party	Term Years	Term Expires
Alabama	Emmet O'Neal	D	4	Jan. —, 1915
Arizona	George W. P. Hunt	D	2	Feb. —, 1914
Arkansas	J. M. Futrell	D	2	Jan. —, 1915
California	Hiram W. Johnson	P	4	Jan. 2, 1915
Colorado	Elias M. Ammons	D	2	Jan. —, 1915
Connecticut	Simeon E. Baldwin	D	2	Jan. —, 1915
Delaware	C. R. Miller	R	4	Jan. 21, 1917
Florida	Park Trammel	D	4	Jan. —, 1917
Georgia	John M. Slaton	D	2	July 1, 1915
Idaho	John M. Haines	R	2	Jan. 6, 1915
Illinois	Edward F. Dunne	D	4	Jan. —, 1917
Indiana	Samuel M. Ralston	D	4	Jan. —, 1917
Iowa	Geo. W. Clarke	R	2	Jan. —, 1915
Kansas	Geo. H. Hodges	D	2	Jan. —, 1915
Kentucky	James B. McCreary	D	4	Dec. 31, 1915
Louisiana	L. E. Hall	D	4	May —, 1916
Maine	Wm. T. Haines	R	2	Jan. —, 1915
Maryland	Phil. L. Goldsborough	R	4	Jan. 13, 1916
Massachusetts	Eugene N. Foss	D	1	Jan. —, 1914
Michigan	W. N. Ferris	D	2	Jan. 1, 1915
Minnesota	Adolph O. Eberhart	R	2	Jan. 1, 1915
Mississippi	Earl Brewer	D	4	Jan. 18, 1916
Missouri	Elliot W. Major	D	4	Jan. —, 1917
Montana	Samuel V. Stewart	D	4	Jan. —, 1917
Nebraska	John H. Morehead	D	2	Jan. —, 1915
Nevada	Tasker L. Oddie	R	4	Dec. 31, 1914
N. Hampshire	Samuel D. Felker	D	2	Jan. —, 1915
New Jersey	James F. Fielder	D	3	Jan. 19, 1914
New Mexico	Wm. C. McDonald	D	4	Dec. 31, 1917
New York	William Sulzer	D	2	Dec. 31, 1914
North Carolina	Locke Craig	D	4	Jan. —, 1917
North Dakota	L. B. Hanna	R	2	Jan. 1, 1915
Ohio	James M. Cox	D	2	Jan. 1, 1915
Oklahoma	Lee Cruce	D	4	Jan. —, 1915
Oregon	Oswald West	D	4	Jan. 11, 1915
Pennsylvania	John K. Tener	R	4	Jan. 17, 1915
Rhode Island	Aram J. Pothier	R	1	Jan. —, 1914
South Carolina	Cole L. Blease	D	2	Jan. —, 1915
South Dakota	Frank Byrne	R	2	Jan. —, 1915
Tennessee	Ben. W. Hooper	R	2	Jan. —, 1915
Texas	Oscar B. Colquitt	D	2	Jan. —, 1915
Utah	William Spry	R	4	Jan. —, 1917
Vermont	Allen M. Fletcher	R	2	Oct. —, 1914
Virginia	William Hodges Mann	D	4	Feb. 1, 1914
Washington	Ernest Lister	D	4	Jan. —, 1917
West Virginia	Henry D. Hatfield	R	4	Mar. 4, 1917
Wisconsin	F. E. McGovern	R & P	2	Jan. —, 1915
Wyoming	Joseph M. Carey	R	4	Jan. —, 1915

GLASS AS A SUBSTITUTE FOR STEEL

Near Frankfort, in Germany, there is a manufacturing plant which turns out glass poles for telephone and telegraph wires. In order to give them solidity and strength there is a thick framework of woven wire in the glass. These poles are taking the place of the wooden ones in many sections of Germany.

It may be that in time all such telegraph and telephone poles throughout the world will be made of glass, because there are so many advantages in them. In the first place they will last practically for all time, except in cases of unusual accident, where they may be broken, as in railroad wrecks. They will last even longer than iron or steel, as weather has practically no effect upon them, nor can insects get into them and destroy them.

And in these days, when wood is becoming more and more valuable, it will be quite a saving of the precious wood to make such things of glass. Experiments are also under way for the manufacture of railroad ties of glass, in which wire netting is imbedded in the glass.

Paving blocks are made of glass and have proved to be a most valuable material for street surfaces, being fitted together in such a manner as to be watertight, no water running down between the blocks. There are, in Lyons, France, a number of streets paved with glass, and they have a better resistance than stone, and also are not such great conductors of heat as stone. These glass paving blocks are now said to be actually cheaper than the granite blocks.

Under the sea are ranges of mountains as huge, peaks as lofty, and chasms as deep, as any on land. In the Pacific there is one peak not many fathoms beneath the surface, which has its base five miles down on the ocean's bed.

WEIGHTS AND MEASURES

LINEAR MEASURE

12 in. = 1 foot. 320 rods = 1 mile.
3 ft. = 1 yard. 5,280 feet = 1 mile.
5½ yds. = 1 rod. 3 miles = 1 league.

The hand (4 in.) is used to measure horses' heights. The nautical mile is 6,086.44 ft. 1 knot is 1.1528 statute miles. 1 degree is 67.168 statute miles.

SQUARE MEASURE

144 sq. in. = 1 sq. ft. 160 sq. rods = 1 acre.
9 sq. ft. = 1 sq. yd. 640 acres = 1 sq. mile.
30¼ sq. yds. = 1 sq. rod.

The side of a square having an area of an acre is approximately 208¾ feet.

SURVEYORS' MEASURE

7.92 inches = 1 link. 10 sq. chains or 160 sq. rods =
25 links = 1 rod. 1 acre.
4 rods = 1 chain. 640 acres = 1 sq. mile.
36 sq. miles (6 miles sq.) = 1 township.

MEASUREMENT OF LAND

16½ feet = 1 rod
320 rods = 1 mile
66 feet = 1 chain
10 chains = 1 furlong
80 chains = 1 mile
5,280 feet = 1 mile
40 sq. rods = 1 rood
43,560 square feet = 1 acre
1 mile square = 640 acres
660 feet square = 10 acres
208 feet and 8½ inches square = 1 acre
933 feet and 4½ inches square = 25 acres

CUBIC MEASURE

1,728 cu. in. = 1 cu. ft. 67.2 cu. in. = 1 qt. dry meas.
27 cu. ft. = 1 cu. yd. 268.8 cu. in. = 1 standard gal.

DRY MEASURE

2 pints = 1 quart. 4 pecks = 1 bushel.
8 quarts = 1 peck.

LIQUID MEASURE

4 gills = 1 pint. 31½ gallons = 1 barrel.
2 pints = 1 quart. 2 barrels = 1 hogshead.
4 quarts = 1 gallon.

APOTHECARIES' WEIGHT

20 grains = 1 scruple. 8 drams = 1 ounce.
3 scruples = 1 dram. 12 ounces = 1 pound.

AVOIRDUPOIS WEIGHT

16 drams = 1 ounce. 100 pounds = 1 hundredweight.
16 ounces = 1 pound. 20 hundredweights = 1 ton.
14 pounds = 1 stone.
Long ton = 2,240 pounds, used mostly in Great Britain.

TROY WEIGHT

24 grains = 1 pennyweight.
20 pennyweights = 1 ounce
12 ounces = 1 pound.
1 carat in diamond measure = 3.2 troy grains.

PAPER MEASURE

24 sheets = 1 quire. 2 reams = 1 bundle.
20 quires = 1 ream. 5 bundles = 1 bale.

MARINERS' MEASURE

6 feet = 1 fathom. 5,280 feet = 1 stat. mile.
120 fathoms = 1 cab. le'th. 6,085 feet = 1 naut. mile.
7½ cable lengths = 1 mile.

METRIC SYSTEM

MEASURES OF LENGTH

10 millimetres (*mm.*)	= 1 centimetre (*cm.*)	= 0.3937	inch.
10 centimetres	= 1 decimetre (*dm.*)	= 0 328084	foot.
10 decimetres	= 1 METRE (*m.*)	= 1.093614	yard.
10 metres	= 1 dekametre (*dam.*)	= 1.9884	rod.
10 dekametres	= 1 hectometre (*hm.*)	= 0.4971	furlong.
10 hectometres	= 1 kilometre (*km.*)	= 0.6214	mile.

MEASURES OF WEIGHT

10 milligrams (*mg.*)	= 1 centigram (*cg.*)	= 0.1543	grain.
10 centigrams	= 1 decigram (*dg.*)	= 1.5432	grain.
10 decigrams	= 1 gramme (*grm.*)	= 15.4323	grain.
10 grammes	= 1 dekagram (*dag.*)	= 5.6438	drams.
10 dekagrams	= 1 hectogram (*hg.*)	= 3.5274	oz.
10 hectograms	= 1 KILOGRAM (*kg.*)	= 2.204622	lbs.
10 kilograms	= 1 myriagram	= 1.5747	stones.
10 myriagrams	= 1 quintal (*q.*)	= 1.9684	cwt.
10 quintals	= 1 tonne (*t.*)	= 0.9842	ton.

MEASURES OF CAPACITY

10 millilitres (*mil.*)	= 1 centilitre (*cl.*)	= 0.0704	gill.
10 centilitres	= 1 decilitre (*dl.*)	= 0.1759	pint.
10 decilitres	= 1 LITRE (*lit.*)	= 0.8799	quart.
10 litres	= 1 dekalitre (*dal.*)	= 2.1997	galls.
10 dekalitres	= 1 hectolitre (*hl.*)	= 2.7497	bushels.

MEASURES OF LAND

100 sq. metres	= 1 are (*a.*)	= 0.0988	rood.
100 ares	= 1 hectare (*ha.*)	= 2.4711	acres.

METRIC MULTIPLES FOR CONVERSION

To Convert			
Grains to grammes	Multiply by		.065
Ounces to grammes	"	"	28.35
Pounds to grammes	"	"	453.6
Pounds to kilograms	"	"	.45
Hundredweights to kilograms	"	"	50.8
Tons to kilograms	"	"	1016.
Grammes to grains	"	"	15.4
Grammes to ounces	"	"	0.35
Kilograms to ounces	"	"	35.3
Kilograms to pounds	"	"	2.3
Kilograms to cwts	"	"	.02
Kilograms to tons	"	"	.001
Inches to millimetres	"	"	25.4
Inches to centimetres	"	"	2.54
Feet to metres	"	"	.3048
Yards to metres	"	"	.9144
Yards to kilometres	"	"	.0009
Miles to kilometres	"	"	1.6
Millimetres to inches	"	"	.04
Centimetres to inches	"	"	.4
Metres to feet	"	"	3.3
Metres to yards	"	"	1.1
Kilometres to yards	"	"	1093.6

1 Yard = 0.9144 metre. 1 Sq. Metre = 1.196 sq. yd.
1 Litre = 1.760 Pints or 0.22 Gals.

EVERYDAY WEIGHTS AND MEASURES

3 teaspoonfuls equal 1 tablespoonful liquid.
4 tablespoonfuls equal 1 wineglass or half a gill.
2 wineglasses equal 1 gill or half a cup.
2 gills equal 1 coffee cupful or 16 tablespoonfuls.
2 coffee cupfuls equal 1 pint.
2 tablespoonfuls equal 1 ounce liquid.
1 tablespoonful of salt equals 1 ounce.
4 coffee cupfuls of sifted flour equal 1 pound.
1 quart unsifted flour equals 1 pound.
8 or 10 ordinary sized eggs equal 1 pound.
1 pint sugar equals 1 pound (white granulated.)
1 pint of finely chopped meat, packed solidly equals 1 pound.

A barrel of flour weighs	196	lbs.
A barrel of salt weighs	280	"
A barrel of beef weighs	200	"
A barrel of pork weighs	200	"
A barrel of fish weighs	200	"
A keg of powder equals	25	"
A stone of lead or iron equals	14	"
A pig of lead or iron equals	21½	st.
Anthracite coal broken—cubic foot averages	54	lbs.
Bituminous coal broken—cubic foot averages	49	"
Cement (hydraulic) Rosendale, weight per bushel	70	"
Cement (hydraulic) Louisville, weight per bushel	62	"
Cement (hydraulic) Portland, weight per bushel	96	"
Gypsum ground, weight per bushel	70	"
Lime, loose, weight per bushel	70	"
Lime, well shaken, weight per bushel	80	"
Sand at 98 lbs. per cu. ft., per bushel	122½	"

18.29 bushels equal a ton. 1.181 tons equal cubic yard.

MEASURES OF TEMPERATURE

Variations of temperature are measured by thermometers, which are graduated on three different systems, viz.:—

The British, or Fahrenheit thermometer.
The Centigrade, or Celsius thermometer.
The Reaumur thermometer.

Reaumur	Centigrade	Fahrenheit	
80	100	212	Water boils at sea-level.
76	95	203	
72	90	194	
68	85	185	
63.1	78.9	174	Alcohol boils.
60	75	167	
56	70	158	
52	65	149	White of egg coagulates
48	60	140	
44	55	131	
42.2	52.8	127	
40	50	122	
36	45	113	Tallow melts.
33.8	42.2	108	
32	40	104	
29.3	36.7	98	Blood heat.
28	35	95	
25.8	32.2	90	
24	30	86	
21.3	26.7	80	
20	25	77	
16	20	68	Temperate.
12.4	15.3	60	
10.2	12.8	55	
8	10	50	
5.8	7.2	45	
4	5	41	
1.3	1.7	35	
0	0	32	Water freezes.
0.9	— 1.1	30	
4	— 9	23	
5.3	— 6.7	20	
8	—10	14	
9.8	—12.2	10	
12	—15	5	
14.2	—17.8	0	Zero Fahr.
16	—20	— 4	
20	—25	—13	
24	—30	—22	
28	—35	—31	
32	—40	—40	Mercury freezes.

To change from centigrade to Fahrenheit multiply by 9, divide by 5 and add 32. To change from Reaumur to Fahrenheit, multiply by 9, divide by 4 and add 32.

MINIMUM WEIGHTS OF PRODUCE

The following are minimum weights of certain articles of produce according to the laws of the United States:

	Per Bu.		Per Bu.
Wheat	60 lbs.	Dried peaches	33 lbs.
Corn, in the ear	70 "	Dried apples	26 "
Corn, shelled	56 "	Clover seed	60 "
Rye	56 "	Flax seed	56 "
Buckwheat	48 "	Millet seed	50 "
Barley	48 "	Hungarian grass seed	50 "
Oats	32 "	Timothy seed	45 "
Peas	60 "	Blue grass seed	44 "
White beans	60 "	Hemp seed	44 "
Castor beans	46 "	Salt (see note below).	
White potatoes	60 "	Corn meal	48 "
Sweet potatoes	55 "	Ground peas	24 "
Onions	57 "	Malt	34 "
Turnips	55 "	Bran	20 "

SALT.—Weight per bushel as adopted by different states ranges from 50 to 80 pounds. Coarse salt in Pennsylvania is reckoned at 80 pounds, in Kentucky and Illinois at 50 pounds per bushel. Fine salt in Pennsylvania is reckoned at 62 pounds, in Kentucky and Illinois at 55 pounds per bushel.

SPECIFIC GRAVITY

Liquids	Per cent.	Timber	Per cent.
Water	100	Cork	24
Sea-water	103	Poplar	38
Dead Sea	124	Fir	55
Alcohol	79	Cedar	61
Turpentine	99	Walnut	67
Wine	100	Cherry	72
Urine	101	Maple	75
Cider	102	Ash	84
Beer	102	Beech	85
Cow's milk	103	Mahogany	106
Goat's "	104	Oak	117
Porter	104	Ebony	133
Sundries	**Per cent.**	**Metals**	**Per cent.**
Indigo	77	Aluminum	267
Ice	92	Zinc	719
Gunpowder	93	Cast Iron	721
Butter	94	Tin	729
Clay	120	Steel	783
Coal	130	Brass	800
Opium	134	Copper	895
Honey	145	Silver	1,047
Ivory	183	Lead	1,135
Sulphur	203	Mercury	1,357
Marble	270	Gold	1,926
Glass	289	Platinum	2,150

To find the weight of a cubic foot, multiply 62.321 lbs. by the specific gravity. To find the number of cubic feet in one ton, divide 35.943 by the specific gravity.

STONE AND BRICK WALLS

A perch of stone is 24.75 cubic feet. When built in the wall, 2¾ cubic feet are allowed for the mortar and filling; hence, 22 cubic feet of stone make one perch of wall.

Masons estimate 3 pecks of lime and 4 bushels of sand to a perch of wall.

To find the number of perches of stone in a wall, multiply together the length, height, and thickness in feet, and divide by 22.

Common bricks are 7¾ to 8 inches long by 4¼ inches wide and 2⅛ inches thick. Front bricks are ¼ inch longer and wider.

It requires 20 common bricks to lay one cubic foot. In an 8-inch wall 15 common bricks make one foot of wall. (See also Material Required for Buildings).

WOOD AND LUMBER MEASURE

A cord of wood contains 128 cubic feet. To ascertain how many cords there are in a pile of wood, multiply the length by the height, and that by the width, and divide the product by 128.

To ascertain the circumference of a tree required to hew a stick of timber of any given number of inches square, divide the given side of the square by 0.225, and the quotient is the circumference required.

Round timber, when squared, loses one-fifth.

To measure round timber, take the girth in inches at both large and small ends, add them, divide by 2, which gives the mean girth; then multiply the length in feet by the square of one-fourth of the mean girth and the product will be the contents in cubic feet. This rule is commonly adopted, and gives four-fifths of the true contents, one-fifth being allowed to the purchaser for waste in sawing.

To measure inch boards, multiply the length in feet by the width in inches, and divide the product by 12. The quotient will be the contents in feet. For lumber 1¼ inches thick, add ¼ to the quotient. If 1⅓ inches thick, add ⅓. If 1¾ inches thick, add ¾. If 2 inches thick, divide by 6 instead of by 12. If 2¼ inches thick, add ¼ to the quotient and so on. If 3 inches thick, divide by 4. If 4 inches thick, divide by 3. If 6 inches thick, divide by 2.

COVERING CAPACITY OF SHINGLES

Average size of shingles—4 x 16 inches—is taken as a basis of calculation.

100 sq. ft. will require, laid 4 inches to the weather.....900
100 sq. ft. will require, laid 4½ inches to the weather....800
100 sq. ft. will require, laid 5 inches to the weather.....720

Three and one-half pounds of four-penny nails are required for laying 1,000 shingles.

Five to ten per cent. should be added to these figures for waste and shortage.

BOARD MEASURE

To ascertain how many board feet are contained in a piece of timber when all the dimensions are given. The size of a board in the first column at the left refers to the width and thickness in inches. The top column designates the length in feet.

SIZE.	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
1x8	8	9⅓	10⅔	12	13⅓	14⅔	16	17⅓	18⅔	20	21⅓	22⅔	24	25⅓	26⅔
1x10	10	11⅔	13⅓	15	16⅔	18⅓	20	21⅔	23⅓	25	26⅔	28⅓	30	31⅔	33⅓
1x12	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
1x14	14	16⅓	18⅔	21	23⅓	25⅔	28	30⅓	32⅔	35	37⅓	39⅔	42	44⅓	46⅔
1x16	16	18⅔	21⅓	24	26⅔	29⅓	32	34⅔	37⅓	40	42⅔	45⅓	48	50⅔	53⅓
2x3	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2x4	8	9⅓	10⅔	12	13⅓	14⅔	16	17⅓	18⅔	20	21⅓	22⅔	24	25⅓	26⅔
2x6	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
2x8	16	18⅔	21⅓	24	26⅔	29⅓	32	34⅔	37⅓	40	42⅔	45⅓	48	50⅔	53⅓
2x10	20	23⅓	26⅔	30	33⅓	36⅔	40	43⅓	46⅔	50	53⅓	56⅔	60	63⅓	66⅔
2x12	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
2x14	28	32⅔	37⅓	42	46⅔	51⅓	56	60⅔	65⅓	70	74⅔	79⅓	84	88⅔	93⅓
2x16	32	37⅓	42⅔	48	53⅓	58⅔	64	69⅓	74⅔	80	85⅓	90⅔	96	101⅓	106⅔
3x4	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
3x6	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
3x8	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
3x10	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
3x12	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
3x14	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140
3x16	48	56	64	72	80	88	96	104	112	120	128	136	144	52	160
4x4	16	18⅔	21⅓	24	26⅔	29⅓	32	34⅔	37⅓	40	42⅔	45⅓	48	50⅔	53⅓
4x6	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
4x8	32	37⅓	42⅔	48	53⅓	58⅔	64	69⅓	74⅔	80	85⅓	90⅔	96	101⅓	106⅔
4x10	40	46⅔	53⅓	60	66⅔	73⅓	80	86⅔	93⅓	100	106⅔	113⅓	120	126⅔	133⅓
4x12	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160
4x14	56	65⅓	74⅔	84	93⅓	102⅔	112	121⅓	130⅔	140	149⅓	158⅔	168	177⅓	186⅔
4x16	64	74⅔	85⅓	96	106⅔	117⅓	128	138⅔	149⅓	160	170⅔	181⅓	192	202⅔	213⅓
6x6	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
6x8	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160
6x10	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
6x12	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
6x14	84	98	112	126	140	154	168	182	196	210	224	238	252	266	280
6x16	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320
8x8	64	74⅔	85⅓	96	106⅔	117⅓	128	138⅔	149⅓	160	170⅔	181⅓	192	202⅔	213⅓
8x10	80	93⅓	106⅔	120	133⅓	146⅔	160	173⅓	186⅔	200	213⅓	226⅔	240	253⅓	266⅔
8x12	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320
8x14	112	130⅔	149⅓	168	186⅔	205⅓	224	242⅔	261⅓	280	298⅔	317⅓	336	354⅔	373⅓
8x16	128	149⅓	170⅔	192	213⅓	234⅔	256	277⅓	298⅔	320	341⅓	362⅔	384	405⅓	426⅔
10x10	100	116⅔	133⅓	150	166⅔	183⅓	200	216⅔	233⅓	250	266⅔	283⅓	300	316⅔	333⅓
10x12	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400
10x14	140	163⅓	186⅔	210	233⅓	256⅔	280	303⅓	326⅔	350	373⅓	396⅔	410	443⅓	466⅔
10x16	160	186⅔	213⅓	240	266⅔	293⅓	320	346⅔	373⅓	400	426⅔	453⅓	480	506⅔	533⅓
12x12	144	168	192	216	240	264	288	312	336	360	384	408	432	456	480
12x14	168	196	224	252	280	308	336	364	392	420	448	476	504	532	560
12x16	192	224	256	288	320	352	384	416	448	480	512	544	576	608	640
14x14	196	228⅔	261⅓	294	326⅔	359⅓	392	424⅔	457⅓	490	522⅔	555⅓	588	620⅔	653⅓
14x16	224	261⅓	298⅔	336	373⅓	410⅔	448	485⅓	522⅓	560	597⅓	634⅔	672	709⅓	746⅔
16x16	256	298⅔	341⅓	384	426⅔	469⅓	512	554⅔	597⅓	640	682⅔	725⅓	768	810⅔	853⅓

Note—By simply multiplying or dividing the above amounts, the number of feet contained in other dimensions can be obtained.

CIRCUMFERENCES AND AREAS OF CIRCLES

Diam.	Circum-ference.	Area.	Diam.	Circum-ference.	Area.	Diam.	Circum-ference.	Area.
1/8	.098	.0007	9	28.27	63.61	47	147.65	1734.94
1/16	.196	.0030	1/4	29.05	67.20	48	150.80	1809.56
1/8	.392	.0122	1/2	29.84	70.88	49	153.94	1885.74
3/16	.589	.0276	3/4	30.63	74.66	50	157.08	1963.50
1/4	.785	.0490	10	31.41	78.53	51	160.22	2042.82
5/16	.981	.0766	1/4	32.20	82.51	52	163.36	2123.72
3/8	1.178	.1104	1/2	32.98	86.59	53	166.50	2206.18
7/16	1.374	.1503	3/4	33.77	90.76	54	169.65	2290.22
1/2	1.570	.1963	11	34.55	95.03	55	172.79	2375.83
9/16	1.767	.2485	1/4	35.34	99.40	56	175.93	2463.01
5/8	1.963	.3067	1/2	36.12	103.86	57	179.07	2551.76
11/16	2.159	.3712	3/4	36.91	108.43	58	182.21	2642.08
3/4	2.356	.4417	12	37.69	113.09	59	185.35	2733.97
13/16	2.552	.5184	1/4	38.48	117.85	60	188.50	2827.43
7/8	2.748	.6013	1/2	39.27	122 71	61	191.64	2922.47
15/16	2.945	.6902	3/4	40.05	127.67	62	194.78	3019.07
1	3.141	.7854	13	40.84	132.73	63	197.92	3117.25
1/8	3.534	.9940	1/4	41.62	137.88	64	201.06	3216.99
1/4	3.927	1.227	1/2	42.41	143.13	65	204.20	3318.31
3/8	4.319	1.484	3/4	43.19	148.48	66	207.34	3421.19
1/2	4.712	1.767	14	43.98	153.93	67	210.49	3525.65
5/8	5.105	2.073	1/4	44.76	159.48	68	213.63	3631.68
3/4	5.497	2.405	1/2	45.55	165.13	69	216.77	3739.28
7/8	5.890	2.761	3/4	46.33	170.87	70	219.91	3848.25
2	6.283	3.141	15	47.12	176.78	71	223.05	3959.19
1/8	6.675	3.546	16	50.26	201.06	72	226.19	4071.50
1/4	7.068	3.976	17	53.40	226.98	73	229.34	4185.39
3/8	7.461	4.430	18	56.54	254.47	74	232.48	4300.84
1/2	7.854	4.908	19	59.69	283.53	75	235.62	4417.86
5/8	8.246	5.411	20	62.83	314.16	76	238.76	4536.46
3/4	8.639	5.939	21	65.97	346.36	77	241.90	4656.63
7/8	9.032	6.491	22	69.11	380.13	78	245.04	4778.36
3	9.424	7.068	23	72.25	415.48	79	248.19	4901.67
1/4	10.21	8.295	24	75.39	452.39	80	251.33	5026.55
1/2	10.99	9.621	25	78.54	490.87	81	254.07	5153.00
3/4	11.78	11.044	26	81.68	530.93	82	257.61	5281.02
4	12.56	12.566	27	84.82	572.56	83	260.75	5410.61
1/4	13.35	14.186	28	87.96	615.75	84	263.89	5541.77
1/2	14.13	15.904	29	91.10	660.52	85	267.04	5674.50
3/4	14.92	17.720	30	94.24	706.86	86	270.18	5808.80
5	15.70	19.635	31	97.38	754.77	87	273.32	5944.68
1/4	16.49	21.647	32	100.53	804.25	88	276.46	6082.12
1/2	17.27	23.758	33	103.67	855.30	89	279.60	6221.14
3/4	18.06	25.967	34	106.81	907.92	90	282.74	6361.73
6	18.84	28.274	35	109.96	962.11	91	285.88	6503.88
1/4	19.63	30.679	36	113.10	1017.88	92	289.03	6647.61
1/2	20.42	33.183	37	116.24	1075.21	93	292.17	6792.91
3/4	21.20	35.784	38	119.38	1134.11	94	295.31	6939.78
7	21.99	38.484	39	122.52	1194.59	95	298.45	7088.22
1/4	22.77	41.282	40	125.66	1256.64	96	301.59	7238.23
1/2	23.56	44.178	41	128.81	1320.25	97	304.73	7389.81
3/4	24.34	47.173	42	131.95	1385.44	98	307.88	7542.96
8	25.13	50.265	43	135.09	1452.20	99	311.02	7697.69
1/4	25.91	53.456	44	138.23	1520.53	100	314.16	7853.98
1/2	26.70	56.745	45	141.37	1590.43	101	317.30	8011.85
3/4	27.48	60.132	46	144.51	1661.90	102	320.44	8171.28

CONVERSION OF VARIOUS TABLES

Feet multiplied by .00019 equals miles.
Yards multiplied by .0006 equals miles.
Links multiplied by .22 equals yards.
Feet multiplied by 1.515 equals links.
Square inches multiplied by .00695 equals square feet.
Circular inches multiplied by .00546 equals square feet.
Square feet multiplied by .111 equals square yards.
Acres multiplied by .4840 equals square yards.
Square yards multiplied by .0002066 equals acres.
Width in chains multiplied by .8 equals acres per mile.
Cubic feet multiplied by .03704 equals cubic yards.
Cubic inches multiplied by .00058 equals cubic feet.
U. S. bushels multiplied by .0461 equals cubic yards.
U. S. bushels multiplied by 1.2444 equals cubic feet.
U. S. bushels multiplied by 2150.42 equals cubic inches.
Cubic feet multiplied by .8036 equals U. S. bushels.
Cubic inches multiplied by .000465 equals U. S. bushels.
U. S. gallons multiplied by .13367 equals cubic feet.
U. S. gallons multiplied by .231 equals cubic inches.
Cubic feet multiplied by 7.48 equals U. S. gallons.
Cylindrical feet multiplied by .0034 equals U. S. gallons.
Cubic foot of water multiplied by 62.5 equals pounds avoird.
Cubic inch of water multiplied by .03608 equals pounds avoird.
Cylindrical inch of water multiplied by .02842 equals lbs. avoird.
Cylindrical foot of water multiplied by 49.1 equals pounds avoird.
Cubic inches multiplied by .004329 equals U. S. gallons.
Cylindrical feet multiplied by 5.874 equals U. S. gallons.
U. S. gallons of water multiplied by 268.8 equals one ton.
Cubic feet of water multiplied by 35.88 equals one ton.
Cylindrical foot of water multiplied by 5.875 equals U. S. gallons.
Diameter of a circle multiplied by 3.14159265 equals circum.
Diameter of a circle mult. by .8862 equals side of an equal square.
Diameter of a circle mult. by .7071 equals side of an inscribed sq.
Square of a diameter multiplied by .7854 equals area of circle.
Circumference of a circle multiplied by .31831 equals diameter.
Side of a square multiplied by 1.128 equals diam. of equal circle.
Square foot of an area multiplied by 1.12837 equals diam. of equal circle.
Square of the diam. of a sphere multiplied by 3.1416 equals convex surface.
Cube of the diam. of a sphere multiplied by .5236 equals solidity.
Diameter of a sphere multiplied by .806 equals dimensions of equal cube.
Diameter of a sphere multiplied by .6667 equals length of equal cylinder.
Cubic inches multiplied by .003607 equals imperial gallons.
Cubic feet multiplied by .6232 equals imperial gallons.
Lineal yards multiplied by .000568 equals statute miles.
Column of water 12 in. high, 1 in. in diameter, equals .341 lbs.
183.346 circular inches equals 1 square foot.
2200 cylindrical inches equals 1 cubic foot.

NUMBER OF GALLONS CONTAINED IN CIRCULAR TANKS

Diameter	When the Depth is							
	3-feet	4-feet	5-feet	6-feet	7-feet	8-feet	9-feet	10-feet
4 feet....	234	312	390	468	546	624	702	780
5 "	363	484	605	726	847	968	1089	1210
6 "	515	700	875	1050	1230	1400	1545	1750
7 "	720	960	1200	1440	1680	1920	2160	2400
8 "	933	1244	1555	1866	2177	2488	2799	3110
9 "	1185	1480	1975	2370	2765	2960	3555	3950
10 "	1464	1952	2440	2928	3416	3904	4392	4880
11 "	1776	2368	2960	3552	4144	4736	5326	5928
12 "	2112	2816	3520	4224	4928	5632	6336	7040

HEIGHT AND WEIGHT OF MEN

Table of Average Height and Weight of Males, Based on Analysis of 74,162 Accepted Applicants for Life Insurance as Reported to the Association of Life Insurance Medical Directors.

Height	Age 15–24	Age 25–29	Age 30–34	Age 35–39	Age 40–44	Age 45–49	Age 50–54	Age 55–59	Age 60–64	Age 65–69
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
5 feet	120	125	128	131	133	134	134	134	131	...
5 feet 1 inch	122	126	129	131	134	136	136	136	134	...
5 feet 2 inches	124	128	131	133	136	138	138	138	137	...
5 feet 3 inches	127	131	134	136	139	141	141	141	140	140
5 feet 4 inches	131	135	138	140	143	144	145	145	144	143
5 feet 5 inches	134	138	141	143	146	147	149	149	148	147
5 feet 6 inches	138	142	145	147	150	151	153	153	153	151
5 feet 7 inches	142	147	150	152	155	156	158	158	158	156
5 feet 8 inches	146	151	154	157	160	161	163	163	163	162
5 feet 9 inches	150	155	159	162	165	166	167	168	168	168
5 feet 10 inches	154	159	164	167	170	171	172	173	174	174
5 feet 11 inches	159	164	169	173	175	177	177	178	180	180
6 feet	165	170	175	179	180	183	182	183	185	185
6 feet 1 inch	170	177	181	185	186	189	188	189	189	189
6 feet 2 inches	176	184	188	192	194	196	194	194	192	192

HEIGHT AND WEIGHT OF WOMEN

The following table gives the relative height and weight of women, all ages. The weight of ordinary clothing, however, is included:

Height	Average	Minimum	Maximum
5 feet	115	98	132
5 feet 1 inch	120	102	138
5 feet 2 inches	125	106	144
5 feet 3 inches	130	111	150
5 feet 4 inches	135	115	155
5 feet 5 inches	140	119	161
5 feet 6 inches	143	121	165
5 feet 7 inches	145	123	167
5 feet 8 inches	148	126	170
5 feet 9 inches	155	131	179
5 feet 10 inches	160	136	184
5 feet 11 inches	165	138	190
6 feet	170	141	196

FACTS ABOUT THE HUMAN BODY

The average number of teeth is 32.

The weight of the circulating blood is 29 lbs.

The average weight of an adult is 150 lbs. 6 oz.

The brain of a man exceeds twice that of any animal.

The average weight of the brain of a man is 3¼ lbs.; of a woman 2 lbs. 11 oz.

Five hundred and forty pounds, or one hogshead and one and a quarter pints of blood pass through the heart in one hour.

A man breathes about 20 times a minute.

The average height of an Englishman is 5 ft. 9 in.; of a Frenchman 5 ft. 4 in.; of a Belgian 5 ft. 6¾ in.

The heart sends nearly 10 lbs. of blood through the veins and arteries each beat, and makes four beats while we breathe once.

One hundred and seventy-five million cells are in the lungs, which would cover a surface thirty times greater than the human body.

The average of the pulse in infancy is 120 per minute; in manhood 80; at sixty years 60. The pulse of females is more rapid than that of males.

VALUE OF RARE UNITED STATES COINS

Gold

One Dollar

Date	Value	
1863	$5.00 to	$10.00
1864	6.00 to	12.00
1875	10.00 to	15.00
Other dates	1.50 to	6.00
Common	1.50 to	1.75

Quarter Eagles ($2.50)

1796, 1797, 1798	$10.00 to	$18.00
1826	12.00 to	20.00

1804, 1805, 1806, 1807, 1808, 1821, 1824, 1825, 1827, 1830, 1833, 1834 with "E Pluribus Unum," 1842, 1863, 1875, 1881 and 1885 command premium of from $3 00 to $6.00.

Three-Dollar

1873	$9.00 to	$18.00
1875	20.00 to	30.00
1876	18.00 to	25.00

Some other dates as high as $6.00.
Common dates, $3.25 to $3.75.

Four-Dollar

1879	$15.00 to	$25.00
1880	25.00 to	35.00

Half Eagles ($5)

1795, 1796, 1797, 1798	$6.50 to	$30.00
1815	75.00 to	100.00
1819	12.00 to	20.00
1821	12.50 to	20.00
1822	75.00 to	150.00
1823 to 1833	7.50 to	25.00
1834, with "E Pluribus Unum"	7.50 to	10.00
1875, without mint mark	7.50 to	10.00
1887, without mint mark	10.00 to	15.00

Eagles ($10)

1795 to 1798	$11.00 to	$30.00
1797 (small Eagle)	20.00 to	22.00
1799, 1800, 1801, 1834, 1838	10.50 to	12.00
1873, 1875, 1876, 1877, without mint marks	12.00 to	20.00

Double Eagles ($20)

1881 to 1887, without any mint mark	$21.00 to	$30.00
1907, Flying Eagle, date in Roman letters	22.00 to	30.00

Fifty-Dollar Gold Pieces

Round or octagon, any date	$75.00 to	$110.00

Silver

Three-Cent Pieces

1863	$0.25 to	$0.50
1864	.75 to	1.00
1865 to 1873	.20 to	.50

Half Dimes

1796	$2.00 to	$5.00
1802	20.00 to	40.00

1794, 1795, 1797, 1800, 1801, 1835, 1846 and 1864 command a fair premium.

Dimes

1797	$ .75 to	$1.00
1802	2.00 to	4.00
1804	5.00 to	15.00

Twenty-Cent Pieces

1874	$2.00 to	$4.00
1877 and 1878	.75 to	1.50

Quarters

1796	$2.00 to	$5.00
1804	1.50 to	5.00
1823	20.00 to	40.00
1827	30.00 to	50.00
1853, Liberty seated, without arrow heads at sides of date	2.00 to	4.00
1893, Columbian or Isabel	.30 to	.40

Half Dollars

1796, Fillet Head, 15 stars	$15.00 to	$30.00
1796, Fillet Head, 16 stars	20.00 to	35.00
1797, Fillet Head, 15 stars	20.00 to	35.00
1838, O between date and bust	15.00 to	30.00
1853, without arrow heads at date	20.00 to	30.00

Dollars

1794, Head, flowing hair	$25.00 to	$40.00
1804, Large Eagle	150.00 to	500.00
1836, Flying Eagle	15.00 to	25.00
1838, Flying Eagle	25.00 to	50.00
1839, Flying Eagle	25.00 to	35.00
1851, 1852, Liberty seated	15.00 to	25.00
1858, Liberty seated	12.00 to	25.00

Copper

Half Cents

1793	$1.00 to	$3.00
1796	10.00 to	25.00
1831	5.00 to	10.00
1836	7.00 to	12.00
1840 to 1849	5.00 to	10.00
1852	5.00 to	8.00

Any half cent commands a premium of from 3c. to 10c.

Cents (large)

1793, Chain, Ameri (instead of America)	$3.50 to	$10.00
1793, Chain America	2.50 to	7.00
1793, Liberty Cap	3.50 to	10.00
1799, Over 1798	5.00 to	25.00
1804	3.50 to	15.00

All other dates, if in good condition, command a premium, more or less.

Small Cents

1856 (Nickel), Flying Eagle	$3.00 to	$5.00
1877 (Bronze), Indian Head	.05 to	.25

Two-Cent (Bronze)

1873	$0.25 to	$1.50

Nickel

Three-Cent

1877	$1.00 to	$2.00

Five-Cent

1877	$.75 to	$2.00

TIME AT WHICH MONEY DOUBLES AT INTEREST

Rate per cent.	Simple interest	Compound interest
2	50 years	35 years, 1 day
2½	40 years	28 years, 26 days
3	33 years, 4 mos.	23 years, 164 days
3½	28 years, 208 days	20 years, 54 days
4	25 years	17 years, 246 days
4½	22 years, 81 days	15 years, 273 days
5	20 years	15 years, 75 days
6	16 years, 8 mos.	11 years, 327 days
7	14 years, 104 days	10 years, 89 days
8	12½ years	9 years, 2 days
9	11 years, 40 days	8 years, 16 days
10	10 years	7 years, 100 days

The foregoing table is a strong argument in favor of a savings bank account. The small interest earned in a year may not seem attractive, but when one considers that money at interest may be tripled in a life time the importance of this becomes apparent.

REIGN OF THE POPES

Pope Pius X is the 263rd prelate to occupy that highest ecclesiastical office. While there have been 263 Popes, there are only 78 names in the list. Twenty-three bore the name of Joannes, 16 that of Gregory, 14 Clemens, 14 Benedict, 13 Leo, 13 Innocent, 10 Pius, 10 Stephen, 9 Boniface, 8 Alexander and 8 Urban. There have been six Popes named Hadrian, while each of the names Paul, Sixtus, Nicholas, Martin and Coelestine has been borne by five Popes. There were 4 Eugenes, 4 Honores and 4 named Anastasius. Four others were named Sergius and 4 more Felix. The names that appear three times in the list are Julius, Calixtus, Lucius and Victor. The names that appear only twice are Marcellus, Galasius, Pashalis, Demasus, Sylvester, Agapetus, Marinus, Theodorus, Constantine and Pelagius. Pope Pius IX was in power 31 years, the longest of all, while some of his predecessors held the reins only a few days.

RULES AND TABLES FOR COMPUTING INTEREST

ONE DOLLAR INTEREST TABLE

Days	3%	4%	5%	6%	7%
1	.00008	.00011	.00013	.00016	.00019
2	.00017	.00022	.00027	.00033	.00038
3	.00025	.00033	.00041	.00050	.00058
4	.00033	.00044	.00055	.00066	.00077
5	.00042	.00056	.00069	.00083	.00097
6	.00050	.00067	.00083	.00100	.00116
7	.00058	.00078	.00097	.00116	.00136
8	.00067	.00089	.00111	.00133	.00155
9	.00075	.00100	.00125	.00150	.00175
10	.00083	.00111	.00138	.00166	.00194
11	.00092	.00122	.00152	.00183	.00213
12	.00100	.00133	.00166	.00200	.00233
13	.00108	.00144	.00180	.00216	.00252
14	.00117	.00156	.00194	.00233	.00272
15	.00125	.00167	.00208	.00250	.00291
16	.00133	.00178	.00222	.00266	.00311
17	.00142	.00189	.00236	.00283	.00330
18	.00150	.00200	.00250	.00300	.00350
19	.00158	.00211	.00263	.00316	.00369
20	.00167	.00222	.00277	.00333	.00388
21	.00175	.00233	.00291	.00350	.00408
22	.00183	.00244	.00305	.00366	.00427
23	.00192	.00256	.00319	.00383	.00447
24	.00200	.00267	.00333	.00400	.00466
25	.00208	.00278	.00347	.00416	.00486
26	.00217	.00289	.00361	.00433	.00505
27	.00225	.00300	.00375	.00450	.00525
28	.00233	.00311	.00388	.00466	.00544
29	.00242	.00322	.00402	.00483	.00563
30	.00250	.00333	.00416	.00500	.00583
Months					
1	.00250	.00333	.00416	.00500	.00583
2	.00500	.00667	.00833	.01000	.01166
3	.00750	.01000	.01250	.01500	.01750
4	.01000	.01333	.01666	.02000	.02333
5	.01250	.01667	.02083	.02500	.02916
6	.01500	.02000	.02500	.03000	.03500
7	.01750	.02333	.02916	.03500	.04083
8	.02000	.02667	.03333	.04000	.04666
9	.02250	.03000	.03750	.04500	.05250
10	.02500	.03333	.04166	.05000	.05833
11	.02750	.03667	.04583	.05500	.06416
Years					
1	.03	.04	.05	.06	.07
2	.06	.08	.10	.12	.14
3	.09	.12	.15	.18	.21
4	.12	.16	.20	.24	.28
5	.15	.20	.25	.30	.35

SIMPLE RULES FOR COMPUTING INTEREST

The following will be found to be excellent rules for finding the interest on any principal for any number of days. When the principal contains cents, point off four places from the right of the result to express the interest in dollars and cents. When the principal contains dollars only, point off two places.

Two per cent—Multiply the principal by the number of days to run, and divide by 180.

Two and one-half per cent—Multiply by number of days, and divide by 144.

Three per cent—Multiply by number of days, and divide by 120.

Three and one-half per cent—Multiply by number of days, and divide by 102.86.

Four per cent—Multiply by number of days, and divide by 90.

Five per cent—Multiply by number of days, and divide by 72.

Six per cent—Multiply by number of days, and divide by 60.

Seven per cent—Multiply by number of days, and divide by 51.43.

Eight per cent—Multiply by number of days, and divide by 45.

Nine per cent—Multiply by number of days, and divide by 40.

Ten per cent—Multiply by number of days, and divide by 36.

Twelve per cent—Multiply by number of days, and divide by 30.

Fifteen per cent—Multiply by number of days, and divide by 24.

INTEREST RATES AND STATUTE OF LIMITATIONS

State	Interest Rate		Limitations		
	Legal rate	By contract	Judgments	Notes	Open Accts.
	Per cent.	*Per cent.*	*Years*	*Years*	*Years*
Alabama	8	8	20	16	3
Arkansas	6	10	10	5	3
Arizona	6	Any	5	4	3
California	7	Any	5	4	2
Colorado	8	Any	20	6	6
Connecticut	6	6	..	..	6
Delaware	6	6	10	6	3
Dist. of Columbia	6	10	12	3	3
Florida	8	10	20	5	2
Georgia	7	8	7	6	4
Idaho	7	12	6	5	4
Illinois	5	7	20	10	5
Indiana	6	8	20	10	6
Iowa	6	8	20	10	5
Kansas	6	10	5	5	3
Kentucky	6	6	15	15	15
Louisiana	5	8	10	5	3
Maine	6	Any	20	*20	6
Maryland	6	6	12	3	3
Massachusetts	6	Any	20	6	6
Michigan	5	10	6	6	6
Minnesota	7	10	10	6	6
Mississippi	6	10	7	6	3
Missouri	6	8	10	10	5
Montana	8	Any	10	8	5
Nebraska	7	10	15	5	0
Nevada	7	Any	6	6	4
New Hampshire	6	6	20	6	6
New Jersey	6	6	20	6	6
New Mexico	6	12	7	6	4
New York	6	6	20	6	6
North Carolina	6	6	10	3	3
North Dakota	7	12	10	6	6
Ohio	6	8	6	15	6
Oklahoma	7	12	1	5	3
Oregon	6	10	*10	6	6
Pennsylvania	6	6	5	6	6
Rhode Island	6	Any	20	6	6
South Carolina	7	8	10	6	6
South Dakota	7	12	10	6	6
Tennessee	6	6	10	6	6
Texas	6	10	10	4	2
Utah	8	Any	8	6	4
Vermont	6	6	8	6	6
Virginia	6	6	20	5	2
Washington	6	12	6	6	1
West Virginia	6	6	10	10	3
Wisconsin	6	10	20	6	6
Wyoming	8	12	5	5	8

*Of record.

The largest national bank in the United States is the National City Bank in New York City, with a capital of $25,000,000, deposits of about $150,000,000, and resources of $312,000,000.

LEGAL HOLIDAYS

Contrary to the general impression there is no national legal holiday. All holidays are made legal by State statute. Even Thanksgiving Day is a legal holiday only when made so by a law of the State. The President's proclamation merely proclaims the day. There are six holidays observed generally throughout the United States.

NEW YEAR'S DAY—All States except Massachusetts.

WASHINGTON'S BIRTHDAY (Feb. 22).

INDEPENDENCE DAY (July 4).

LABOR DAY (first Monday in Sept.)—All States except Wyoming and part of Louisiana.

THANKSGIVING DAY (last Thursday in November)—Not statutory in some States.

CHRISTMAS DAY (Dec. 25).

These holidays and Memorial Day are legal holidays to all governmental executive departments by act of Congress. Other legal holidays are:

Jan. 8—Anniversary Battle New Orleans: La.

Jan. 19—Lee's Birthday: Ark., Fla., Ga., N. C., S. C., Va., Ala.

Feb. 12—Lincoln's Birthday: Ill., Minn., N. J., N. Y., Conn., Wash., N. D., Pa., S. D., Wyo., Nev., Del., Kan., Mont., Mich., W. Va., Utah, Iowa, Colo., N. M.

Feb. 20—Mardi Gras: Ala., La.

Mar. 2—Anniversary Texas Independence: Tex.

April 10—Good Friday: Ala., Conn., La., Minn., N. J., Pa., Tenn.

April 12—Anniversary of the Adoption of the Halifax Resolutions: N. C.

April 19—Patriots' Day: Mass., Me.

April 21—Anniversary Battle San Jacinto: Tex.

April 26—Confederate Memorial Day: Ala., Fla., Ga., Miss.

May 10—Memorial Day: N. C., S. C.

May 20—Anniversary of signing of Mecklenburg Declaration of Independence: N. C.

May 30—Conf. Memorial Day: Va.

May 30—Memorial Day: In Dist. of Col., all States, except Ala., Ark., Fla., Ga., La., Miss., N. C., S. C., Tex.

June 3—Jefferson Davis' Birthday: Fla., Ga., S. C., Ala., La., Tenn., Tex., Miss., Confederate Decoration Day.

June 15—Pioneer Day: Idaho.

July 24—Pioneers' Day: Utah.

Aug. 1—Colorado Day: Colo.

Aug. 16—Bennington Battle Day: Vt.

Sept. 9—Admission Day: Cal.

Sept. 12—Old Defenders' Day: Md.

Oct. 12—Columbus Day: Ala., Del., Ind., Kan., W. Va., Vt., Idaho, Ore., Tex., Wash., Me., Colo., N. Y., N. J., R. I., Conn., Mich., Mo., Ohio, Md., Mass., Pa., Ill., Mont., Cal., Ky.

Oct. 31—Admission Day: Nev.

Nov. 1—All Saints' Day: La.

Nov. 3—General Election Day: All States, except Ala., Ark., Conn., Del., Ga., Me., Mass., Miss., Neb., N. C., Utah, Ohio, Kan., W. Va.

Arbor Day is a legal holiday in N. D., Ill., Minn., Me. and Wyo., day being set by Governor. In Neb., Apr. 22; Mont., 3rd Tues. in Apr.; Ariz., 1st Mon. in Feb.; Utah, Apr. 15; R. I., 2nd Fri. in May; Idaho, 1st Fri. after May 1; Fla., 1st Fri. in Feb.; Ga., 1st Fri. in Dec. N. M. second Friday in March.

Fast Day whenever appointed in April, N H.

Every Saturday, after 12 o'clock noon, is a legal holiday in N. Y., N. J., Penn., Md., N. C., Ind., Mich., Ohio, Cal., Tenn. Va. and Dist. of Col.; in La. and Mo. in cities over 100,000; in Ill. in cities over 200,000; in New Castle Co., Del., and in Charleston and Richland Cos., S. C.

OTHER ANNIVERSARIES.

Jan. 29—Carnation Day; birthday of William McKinley

Feb. 2—Candlemas or Groundhog Day.

Feb. 14—St. Valentine's Day.

Mar. 15—Birthday of Andrew Jackson.

Mar. 17—St. Patrick's Day.

Apr. 27—Birthday of Gen. U. S. Grant.

May 1—Dewey Day.

June 14—Flag Day.

June 17—Bunker Hill Day, Mass.

July 12—Orangemen's Day.

July 15—Stony Point Day; St. Swithin's Day.

Sept. 16—Antietam Day.

Oct. 31—Hallowe'en.

UNITED STATES BANKRUPTCY LAW

The United States Bankruptcy Act was passed in July, 1898, and amended in 1903, 1906 and 1910.

Important sections are:

Sec. 4. Who may become bankrupts: a—Any person, except a municipal, railroad, insurance, or banking corporation, shall be entitled to the benefits of this act as a voluntary bankrupt. b—Any natural person (except a wage-earner or a person engaged chiefly in the farming or the tillage of the soil), any unincorporated company, and any moneyed business or commercial corporation, except a municipal, railroad, insurance, or banking corporation, owing debts to the amount of $1,000, or over, may be adjudged an involuntary bankrupt upon default or an impartial trial, and shall be subject to the provisions and entitled to the benefits of this act.

The bankruptcy of a corporation shall not release its officers, directors or stockholders, as such, from any liability under the laws of a state or territory or of the United States.

Sec. 7. Duties of bankrupts—(a) The bankrupt shall (1) attend the first meeting of his creditors, if directed by the court or judge thereof to do so, and the hearing upon his application for a discharge, if filed; (2) comply with all lawful orders of the court; (3) examine the correctness of all proofs of claims filed against his estate; (4) execute and deliver such papers as shall be ordered by the court; (5) execute to his trustee transfers of all his property in foreign countries; (6) immediately inform his trustee of any attempt by his creditors or other persons to evade the provisions of this act coming to his knowledge; (7) in case of any person having to his knowledge proved a false claim against his estate, disclose that fact immediately to his trustee; (8) prepare, make oath to, and file in court within ten days, unless further time is granted after the adjudication of an involuntary bankrupt, and with the petition of a voluntary bankrupt, a schedule of his property, showing the amount and kind of property, the location thereof its money value in detail, and a list of its creditors, showing their residences, if known (if unknown that fact to be stated), the amount due each of them, the consideration thereof, the security held by them, if any, and a claim for such exemptions as he may be entitled to, all in triplicate, one copy of each for the clerk, one for the referee and one for the trustee; and (9) when present at the first meeting of his creditors, and at such other times as the court shall order, submit to an examination concerning the conducting of his business, the cause of his bankruptcy, his dealings with his creditors and other persons, the amount, kind and whereabouts of his property, and in addition, all matters which may affect the administration and settlement of his estate; but no testimony given by him shall be offered in evidence against him in any criminal proceedings.

Provided, however, that he shall not be required to attend a meeting of his creditors, or at or for an examination at a place more than 150 miles distant from his home or principal place of business, or to examine claims except when presented to him, unless ordered by the court, or a judge thereof, for cause shown, and the bankrupt shall be paid his actual expenses from the estate when examined or required to attend at any place other than the city, town or village of his residence. Discharge in bankruptcy relieves the bankrupt from all his provable debts, except taxes due the U. S., state, county or municipality in which he resides, liabilities for money or property obtained by false pretences, willful and malicious injury to persons or property, alimony, debts created by fraud or misappropriation, etc.

Sec. 17. Debts Not Affected by a Discharge.—A discharge in bankruptcy shall release a bankrupt from all of his provable debts, except such as (1) are due as a tax levied by the United States, the State, county, district, or municipality in which he resides; (2) are liabilities for obtaining property by false pretenses or false representations, or for willful and malicious injuries to the person or property of another, or for alimony due or to become due, or for maintenance or support of wife or child, or for seduction of an unmarried female, or for criminal conversation; (3) have not been duly scheduled in time for proof and allowance, with the name of the creditor if known to the bankrupt, unless such creditor had notice or actual knowledge of the proceedings in bankruptcy; or (4) were created by his fraud, embezzlement, misappropriation, or defalcation while acting as an officer or in any fiduciary capacity.

PATENTS AND TRADE-MARKS

PATENTS

INVENTIONS PATENTABLE.—Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, not known or used by others in this country before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, for more than two years prior to his application, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceedings had, obtain a patent.

APPLICATION.—Application is to be made in writing, to the Commissioner of Patents, giving a description of the article, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery. The specification and claim shall be signed by the inventor and attested by two witnesses.

OATH.—The applicant shall make oath that he does verily believe himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition or improvement for which he solicits a patent; that he does not know and does not believe that the same was ever before known or used; and shall state of what country he is a citizen.

PATENTS FOR DESIGNS AUTHORIZED.—Any person who has invented any new, original, and ornamental design for an article of manufacture, not known or used by others in this country before his invention thereof, and not patented or described in any printed publication in this or any foreign country before his invention thereof, or more than two years prior to his application, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees and other due proceedings had, the same as in cases of invention or discoveries, obtain a patent therefor.

DRAWINGS.—Drawings must be made with India ink alone, on pure white paper, the thickness of three sheets of Bristol board, and containing a calendared and smooth surface. All drawings must be made with pen only and every line and letter, signature and shading must be absolutely black. The size of the sheet must be exactly 10x15 inches, and there must be an inch margin on each side, leaving the "sight" exactly 8x13 inches. When the view is longer than the width of the sheet, it may be turned on its side, while the signature of the proprietor of the trade mark must be placed at the lower right hand corner and the signature of the witnesses at the lower left hand corner, but, in no instance, shall they encroach upon the drawing. Drawings must be packed flat or rolled for transmission to the Patent Office—not folded.

FOREIGN PATENTS.—No person otherwise entitled thereto shall be debarred from receiving a patent for his invention or discovery, nor shall any patent be declared invalid by reason of its having been first patented or caused to be patented by the inventor or his legal representatives or assigns in a foreign country, unless the application for said foreign patent was filed more than twelve months, in cases within the provisions of section forty-eight hundred and eighty-six of the Revised Statutes, and four months in cases of designs, prior to the filing of the application in this country, in which case no patent shall be granted in this country.

CONTENTS AND DURATION.—Every patent shall contain a short title or description of the invention or discovery, correctly indicating its nature and design, and a grant to the patentee, his heirs or assigns, for the term of *seventeen years*, of the exclusive right to use the invention throughout the United States, referring to the specification for the particulars thereof.

FEES.—Filing each original application for a patent, except in design cases, $15.

Issuing each original patent, except in design cases, $20.

In design cases: For three years and six months, $10; for seven years, $15; for fourteen years, $30.

Every application for the reissue of a patent, $30.

Filing each disclaimer, $10.

An appeal for the first time from the primary examiners to the examiners-in-chief, $10.

Every appeal from the examiners-in-chief to the Commissioner, $20.

Copies of records in the Patent Office, ten cents per hundred words; if certified twenty-five cents additional for each certification.

For recording every assignment, power of attorney, or other paper, of three hundred words or under, $1; of over three hundred and under one thousand words, $2; and for each additional thousand words or fraction therof, $1.

Printed copies of specifications and drawings of United States patents are furnished for five cents each; certified copies of such drawings and specifications, twenty-five cents additional for each certification.

For photographic copies of drawings, twenty-five cents each.

The Patent Office advises applicants to avoid doing business with attorneys who advertise the possession of unusual facilities for obtaining patents. A model should not be filed unless asked for by the office.

TRADE-MARKS

WHO MAY REGISTER.—A trade-mark may be registered by any person, firm, corporation, or association domiciled within the territory of the United States, or residing in or located in any foreign country which, by treaty, convention, or law, affords similar privileges to the citizens of the United States, and who is the owner of such trade-mark, and uses the same in commerce with foreign nations, or among the several States, or with Indian tribes, upon payment of the fee required by law and other due proceedings had.

APPLICATION.—An application for the registration of a trade-mark must be made to the Commissioner of Patents and must be signed by the applicant. The complete application comprises: (1) A petition, requesting registration, signed by the applicant. (2) A statement specifying the name, domicile, location, and citizenship of the party applying, and if the applicant be a corporation or association, the State or nation under the laws of which organized; the class of merchandize (according to the official classification), and the particular description of goods comprized in such class upon which the trade-mark has actually been used; a statement of the mode in which the same is applied and affixed to the goods, and the length of time during which the trade-mark has been used upon the goods specified. A description of the trade-mark itself shall be included, if desired by the applicant or required by the Commissioner, provided such description is of a character to meet the approval of the Commissioner. (3) A drawing of the trade-mark, signed by the applicant, or his attorney, which shall be a facsimile of the same as actually used upon the goods. (4) Five specimens or facsimiles of the trade-mark as actually used upon the goods.

WHAT MAY BE REGISTERED.—No trade-mark will be registered unless it shall be made to appear that the same is used as such by said owner in commerce among the several States, or between the United States and some foreign nation or Indian tribe; no trade-mark will be registered which consists of, or comprizes the flag or coat of arms or other insignia of the United States, or any simulation thereof, or of any State or municipality, or of any foreign nation, or which consists of or comprizes any design or picture that has been adopted by any fraternal society as its emblem, or of any name, distinguishing mark, character, emblem, colors, flag, or banner adopted by any institution, organization, club, or society which was incorporated in any state in the United States prior to the date of the adoption and use by the applicant: or which trade-mark is identical with a registered or known trade-mark owned and in use by another, and appropriated to merchandize of the same descriptive properties, or which so nearly resembles a registered or known trade-mark owned and in use by another, and appropriated to merchandize of the same descriptive properties as to

be likely to cause confusion or mistake in the mind of the public, or which consists merely in the name of an individual, firm, corporation, or association, not written, printed, impressed, or woven in some particular or distinctive manner or in association with a portrait of the individual, or merely in words or devices which are descriptive of the goods with which they are used, or of the character or quality of such goods, or merely a geographical name or term: no portrait of a living individual will be registered as a trade-mark, except by the consent of such individual evidenced by an instrument in writing: and no trade-mark will be registered which is used in unlawful business, or upon any article injurious in itself, or which has been used with the design of deceiving the public in the purchase of merchandize, or which has been abandoned. (In an act approved Feb. 18, 1911, a provision was made permitting the name or part of the name of the applicant to serve.)

PATENT OFFICE STATISTICS

During the fiscal year ended June 30, 1912, there were received 69,236 applications for mechanical patents, 1,775 applications for designs, 195 applications for reissues, 7,238 applications for trade-marks, 941 applications for labels, and 362 applications for prints. There were 35,539 patents granted including reissues and designs, and 4,635 trade marks, 625 labels, and 268 prints were registered. The number of patents that expired was 19,634. The number of allowed applications which were by operation of law forfeited for nonpayment of final fees was 6,970. The total receipts of the office were $2,094,059.50, the total expenditures were $2,019,236.01, and the net surplus of receipts over expenditures was $74,823.49. The grand total of net surplus receipts over all expenditures is now $7,138,749.25.

These statistics show a material increase during the last fiscal year over the fiscal year ended June 30, 1911. The total number of applications for patents for inventions, for designs, for reissue of patents, registration of trade-marks, registration of labels and registration of prints, disclaimer to patents, and appeals on the merits is 81,459. The total of all applications for the fiscal year immediately previous was 76,383 for the same period, which shows an increase of 5,076 applications received. The number of applications for mechanical patents shows an increase of 4,082 over the previous fiscal year, or 6.26 per cent, and an increase of 40.72 per cent for the 10 years since 1903.

In proportion to population more patents were issued to citizens of Connecticut than to those of any other State—1 to every 1,319. Next in order are the following: District of Columbia, 1 to every 1,385; California, 1 to every 1,516; Colorado, 1 to every, 1,675. South Carolina showed the lowest proportion, 1 to every 17,620. Of foreign patents more were granted to Germany than any other country.

A DECADE OF PATENT OFFICE BUSINESS

Year	Applications	Caveats filed	Patents and reissues	Cash received	Cash expended	Surplus
1900	41,980	1,731	26,499	$1,350,828.53	$1,260,019.62	$90,808.91
1901	46,449	1,842	27,373	1,449,398.16	1,297,385.64	152,012.52
1902	49,641	1,851	27,886	1,552,859.08	1,393,345.54	159,513.54
1903	50,213	1,771	31,699	1,642,201.81	1,448,645.81	193,156.00
1904	52,143	1,808	30,934	1,657,326.53	1,476,000.38	181,326.15
1905	54,971	1,896	30,399	1,806,758.14	1,479,633.22	327,124.92
1906	56,482	1,885	31,965	1,790,921.38	1,554,891.20	236,030.18
1907	58,762	1,967	36,620	1,910,618.14	1,631,458.36	279,159.78
1908	61,475	2,110	33,682	1,896,847.67	1,712,303.42	184,544.25
1909	65,839	1,948	37,421	2,042,828.14	1,955,151.14	87,677.00
1910	64,629	970	35,930	2,025,536.69	2,005,711.94	19,824.75
1911	69,121	.....	34,084	2,019,388.03	1,953,689.91	65,698.12
1912	71,206	.....	35,539	2.094,059.50	2,019,236.01	74,823.49

PATENT DECISIONS

Twice in little more than a twelvemonth, the Supreme Court has passed upon an issue of the most fundamental character concerning the right of a patentee to control the selling of his product. In the case decided March 11, 1912, the issue involved was whether the owner of the patent could legally prevent the buyer of the patented article from using it in connection with any materials or adjuncts he might choose to employ; in the case decided May 26, 1913 the issue was whether the owner of the patent could legally prevent the buyer of the patented article from selling it at a price lower than that fixed by the patentee as its retail or reselling price. The first case was decided *in favor* of the unrestricted control of the patentee over the use of his product; the second was decided *against* the unrestricted control of the patentee over its price.

FINGER PRINTS

Twenty years have elapsed since the discovery of "finger prints" by Francis Galton. The average man does not realize that this mode of identification is absolutely unassailable, never having failed when fairly tried. Like ridges have never been found on the fingers of any two persons. To-day it is utilized in many odd but useful ways. Unlettered persons no longer need to sign documents with the mark of the cross; a finger print is far more positive and absolutely proof against forgery. Banks are already confirming signatures and corporations are beginning to identify employees in this way. Finger prints are taken as signatures to receipts for payment to the workmen constructing the Panama Canal.

Lieutenant Faurot of the New York Police Department has suggested also that "birth certificates be accompanied by the baby's and mother's finger prints," and it has been mooted even that all individuals establish a record of their identity by depositing their finger prints in the police or some other legally designated office, to be duplicated in a central office at the national capitol. Since the finger prints are reliable until decomposition has obliterated them, their value in establishing lost identity is obvious. Many suits for fraudulent insurance claims would be prevented if the insured were compelled to add a finger print to the usual signature, furnishing mute but unerring evidence.

HOW TO GET A COPYRIGHT

For Works Reproduced in Copies for Sale.—1. Publish the work with the copyright notice. The notice may be in the form "Copyright, 19.... (year date of publication), by..... (name of copyright proprietor)." See below for additional information as to the form and place of the notice. The date in the copyright notice should agree with the year date of publication.

2. Promptly after publication, send to the Copyright Office, Library of Congress, Washington, D. C., two copies of the best edition of the work, with an application for registration and a money order payable to the Register of Copyrights for the statutory registration fee of $1. As to special fee for registration of photographs, see below.

In the case of books the copies deposited must be accompanied by an affidavit, under the official seal of an officer authorized to administer oaths, stating that the type-setting, printing, and binding of the book have been performed within the United States. Affidavit and application forms will be supplied by the Copyright Office on request.

This affidavit is not required in the case of a book of foreign origin in a language or languages other than English, as such books are not required to be manufactured in the United States.

In the case of contributions to periodicals send one complete copy of the periodical containing the contribution with application and fee. No affidavit is required.

For Works not Reproduced in Copies for Sale.—Copyright may also be had of the works of an author, of which copies are not reproduced for sale, by the deposit, with claim of copyright, of one complete copy of such work if it be a lecture or similar production or a dramatic musical or dramatico-musical composition; of a title and description, with one print taken from each scene or act, if the work be a motion-picture photoplay; of a photographic print, if the work be a photograph; of a title and description, with not less than two prints taken from different sections of a complete motion picture. if the work be a motion picture other than a photoplay; or of a photograph or other identifying reproductions thereof, if it be a work of art or a plastic work or drawing. But the privilege of registration of copyright secured hereunder shall not exempt the copyright proprietor from the deposit of copies, where the work is later reproduced in copies for sale.

Fees.—The statutory fee for registration of any work is one dollar, including a certificate of registration under seal. In the case of a photograph, if a certificate is not demanded the fee is fifty cents. In the case of several volumes of the same book deposited at the same time, only one registration at one fee is required.

Notice of Copyright in Printed Works.—The law prescribes that the copyright notice shall consist either of the word "Copyright" or the abbreviation "Copr.", accompanied by the name of the copyright proprietor, and the year in which publication was made. In the case, however, of copies of works specified under "application forms", the notice may consist of the letter C inclosed within a circle, accompanied by the initials, monogram, mark, or symbol of the copyright proprietor: *Provided*, That on some accessible portion of such copies or of the margin, back, permanent base, or pedestal, or of the substance on which such copies shall be mounted, his name shall appear. But in the case of works in which copyright is subsisting when this act shall go into effect, the notice of copyright may be either in one of the forms prescribed herein or in one of those prescribed by the Act of June eighteenth, eigeteen hundred and seventy-four.

In the case of a periodical the notice should be applied either upon the title-page, or upon the first page of text of each separate number, or under the title heading; if a musical work, upon its title page or the first page of music.

One notice of copyright in each number of a newspaper or periodical published suffices.

Where the copyright proprietor has sought to comply with the law with respect to notice, the omission of such notice by mistake from a particular copy or copies shall not invalidate the copyright or prevent recovery for infringement against any person who, after actual notice of the copyright, begins an undertaking to infringe it, but shall protect an innocent infringer who has been misled by the omission of the notice.

Remittances should be made by money order, payable to the Register of Copyrights. All remitters are respectfully urged to send an identifiable remittance. Postage stamps or checks should not be sent as fees.

Application Forms.—The Copyright office has issued the following application forms, which should be used when applying for copyright registration:

A1. Book by citizen or resident of the U. S.

A1 for. Book by citizen or resident of a foreign country, but manufactured in the U. S.

A2. Edition printed in the United States of a book originally published abroad in English.

A3. Book by foreign author in foreign language.

A4. Ad interim. Book published abroad in the English language.

A5. Contribution to a newspaper or periodical.

B1. Periodical. Registration of single issue.

B2. Periodical. General application and deposit.

C. Lecture, sermon, or address.

D1. Published dramatic composition.

D2. Dramatic composition not reproduced for sale.

D3. Dramatico-musical composition.

E1. Published musical composition.

E2. Musical composition not reproduced for sale.

F. Published map.

G. Work of art (painting, drawing, or sculpture); or model or design for a work of art.

H. Reproduction of a work of art.

I. Drawing or plastic work of a scientific or technical character.

J1. Photograph published for sale.

J2. Photograph not reproduced for sale.

K. Print or pictorial illustration.

L. Motion-picture photoplays;

M. Motion pictures other than photoplays:

INFRINGEMENT OF COPYRIGHT

If any person shall infringe the copyright in any work protected under the copyright laws of the United States, such person shall be liable:

(a) To an injunction restraining such infringement.

(b) To pay to the copyright proprietor such damages as the copyright proprietor may have suffered due to the infringement as well as all the profits which the infringer shall have made from such infringement, and in proving profits the plaintiff shall be required to prove sales only and the defendant shall be required to prove every element of cost which he claims, or in lieu of actual damages and profits such damages as to the court shall appear to be just and in assessing such damages the court may, in its discretion, allow the amounts as hereinafter stated, but in case of a newspaper reproduction of a copyrighted photograph such damages shall not exceed the sum of $200 nor be less than the sum of $50, and in the case of the infringement of a undramatized or non-dramatic work by means of motion pictures, where the infringer shall show that he was not aware that he was infringing, and that such infringement could not have been reasonably foreseen, such damages shall not exceed the sum of $100; and in the case of an infringement of a copyrighted dramatic or dramatico-musical work by the maker of motion pictures and his agencies for distribution thereof to exhibitors, where such infringer shows that he was not aware that he was infringing a copyrighted work and that such infringements could not reasonably have been foreseen, the entire sum of such damages recoverable by the copyright proprietor from such infringing maker and his agencies for the distribution to exhibitors of such infringing motion picture shall not exceed the sum of $5,000 nor be less than $250, and such damages shall in no other case exceed the sum of $5,000 nor be less than the sum of $250, and shall not be regarded as a penalty. But the foregoing exceptions shall not deprive the copyright proprietor of any other remedy given him under this law, nor shall the limitation as to the amount of recovery apply to infrigements

occurring after the actual notice to a defendant, either by service of process in a suit or other written notice served upon him.

1. In the case of a painting, statue, or sculpture, $10 for every infringing copy made or sold by or found in the possession of the infringer or his agents or employers:

2. In the case of any work enumerated in section five of the Copyright Act, except a painting, statue or sculpture, $1 for every infringing copy made or sold by or found in the possession of the infringer or his agents or employes:

3. In the case of a lecture, sermon, or address, $50 for every infringing delivery:

4. In the case of a dramatic or dramatico-musical or a choral or orchestral composition, $100 for the first and $50 for every subsequent infringing performance; in the case of other musical compositions $10 for every infringing performance:

(c) To deliver up on oath, to be impounded during the pendency of the action, upon such terms and conditions as the court may prescribe, all articles alleged to infringe a copyright:

(d) To deliver up on oath for destruction all the infringing copies or devices, as well as all plates, moulds, matrices or other means for making such infringing copies as the court may order,

(e) Whenever the owner or a musical copyright has used or permitted the use of the copyrighted work upon the parts of musical instruments serving to reproduce mechanically the musical work, then in case of infrigement of such copyright by the unauthorized manufacture, use, or sale of interchangeable parts, such as disks, rolls, bands, or cylinders for use in mechanical music-producing machines adapted to reproduce the copyrighted music, no criminal action shall be brought, but in a civil action an injunction may be granted upon such terms as the court may impose, and the plantiff shall be entitled to recover in lieu of profits and damages a royalty provided also that whenever any person in the absence of a license agreement, intends to use a copyrighted musical composition upon the parts of instruments serving to reproduce mechanically the musical work, relying upon the compulsory license provision of this act, he shall serve notice of such intention, by registered mail, upon the copyrighted proprietor at his last address disclosed by the records of the copyright office, sending to the copyright office a duplicate of such notice; and in case of his failure so to do the court may, in its discretion, in addition, award the complainant a further sum, not to exceed three times the amount provided by section one, subsection (e), of the Copyright Act, by way of damages, and not as a penalty, and also a temporary injunction until the full award is paid.

THE NOBEL PRIZES

Five prizes are annually awarded from the fund of $9,000,000 bequeathed for the purpose by Alfred Bernard Nobel, a Swedish inventor, who died in 1896. From the invention and manufacture of dynamite and smokeless powder he made his fortune. The prizes average about $40,000 each annually, and with gold medals and diplomas, are awarded on December 10 of each year, the anniversary of the death of the founder. The sum available for the prizes is divided into five equal parts and distributed as follows: "One to the person who, in the domain of physics, has made the most important discovery or invention, one to the person who has made the most important chemical discovery or invention, one to the person who has made the most important discovery in the domain of medicine or physiology, one to the person who in literature has provided the most excellent work of an idealistic tendency, and one to the person who has worked most or best for the fraternization of nations and the abolition or reduction of standing armies, and in the calling and propagating of peace congresses."

The Swedish Academy of Science awards the prizes in physics and in chemistry; the Caroline Institute in Stockholm that in medicine; the Swedish Academy in Stockholm that in literature; and a committee of five members, chosen by the Norwegian Storthing (legislature), the peace prize. The Nobel Institute began its work in 1900. It is composed of four members, who must be Swedes, elected for two years each by deputies selected by the four institutions named, and a fifth, chosen by the Swedish Government, who is president of the Institute. The Institute has the care of the funds and hands over to the awarders the amounts to be given as prizes. Within six months after the awards the recipients, except of the peace prize, are expected to lecture before the institution charged with the award.

The awards for 1912 were as follows:

Medicine—Dr. Alexis Carrel, of the Rockefeller Institute of Medical Research, New York.

Physics—Gustaf Dalen, a Swiss engineer, head of the Stockholm Gas Company.

Chemistry—Divided between Prof. Grignard of Nancy University and Prof. Paul Sabatier of Toulouse University.

Literature—Gerhart Hauptman, German poet, novelist and dramatist, of Berlin.

Peace—Not awarded. "No work deserving of the prize."

Up to the present time only three Americans have received the Nobel prizes. They are Prof. Albert A. Michelson, of the University of Chicago, who was awarded the prize for physics in 1907; Theodore Roosevelt, who received the peace prize in 1906, in recognition of his efforts to end the war between Russia and Japan, and Dr. Alexis Carrel, who received the prize in medicine in 1912.

THE RHODES SCHOLARSHIPS

The Rhodes Scholarships at Oxford University, Eng., were established under the will of Cecil Rhodes, the South African millionaire. He died at Cape Town, March 26, 1902, and his will, dated July 1, 1899, directed the trustees to apply a part of his fortune, about $10,000,000, to the establishment of a fund for the support of a certain number of scholarships to cover the cost of a three years' course at Oxford. He allotted 100 to the United States (two to each State and Territory), 15 to Germany, and from 3 to 9 each to the several British Colonies. In their award account was to be taken not only of scholastic and literary attainments, but also of qualities of manhood, truth, courage, devotion to duty, generosity, kindness, moral force of character, desire to serve the public, and success in athletic sports. The methods of choosing the scholars vary. In most of the States of this country the choice is left to a Committee of Selection. This system also prevails in four Canadian provinces, and in Bermuda, Jamaica, Newfoundland, New Zealand, and Australia. In Cape Colony the scholars are chosen by the schools to which the scholarships are assigned, and in Germany the students are named by the Emperor. In a few of the States in this country and some Canadian provinces the choice is made in turn by the leading universities. In this country candidates must have completed in a satisfactory manner at least two years' work in a college of liberal arts and sciences. The limits of age are 19 and 25. The student must be a U. S. citizen with five years' domicile and be unmarried. The annual allowance to each student is £300 (about $1,500), payable in quarterly instalments, and is expected to meet the expenses of the year for both term time and vacation. The first payment is not made until a student has gone into college residence at Oxford. Qualifying examinations, which are not competitive, are held in October in each two years out of three. The next examinations will be in 1915. Information in regard to particulars can be secured at any college, or from F. J. Wylie, Oxford Secretary to the Rhodes Trustees, Oxford, Eng., or the Secretary to the Rhodes Trust, 17 Waterloo Place, London, S. W.

STREET-CAR LETTER BOXES IN UNITED STATES

The first experimental installation of street-railway letter-boxes in the United States was made some twelve years ago, and this service has since been (and still is) in operation in Des Moines and Burlington, Iowa, and Grand Rapids, Mich., but is not now being extended to other American cities. Ordinary letter-boxes are attached to the front or rear of cars running on regular schedules, and the mail is collected therefrom each time the cars pass the city post office. The cars may be stopped by signal at any regular stopping place and mail deposited, whether the person so signaling intends to board the car or not.

IMPORTANT DATES IN AMERICAN HISTORY

1492. Oct. 12, Columbus discovers America.
1497. Newfoundland and Labrador discovered by the Cabots.
1498. Aug. 1, Columbus discovers the South American continent.
1499. South America visited by Americus Vespucius.
1500. The Amazon at its mouth discovered by Pinçon.
1513. March 27, Florida discovered by Juan Ponce de Leon.
Sept. 26, Pacific Ocean discovered by Balboa.
1519. March 13, Cortez lands at Tabasco in Mexico.
1520. Magellan discovers Patagonia.
De Ayllon discovers Carolina.
1522. Bermudas discovered by Juan Bermudez.
1534. Cartier entered and named the Gulf of St. Lawrence.
1537. California discovered by Cortez.
1539. De Soto heads an expedition to conquer Florida.
1541. De Soto discovers the Mississippi.
1563. Slaves first imported into the West Indies by the English.
1565. St. Augustine founded by the Spaniards.
1584. Sir Walter Raleigh dispatches two vessels to Virginia.
1586. Discovery of Davis's Strait.
1602. May 15, Cape Cod discovered and named by Bartholomew Gosnold.
1608. July 3, Quebec founded by Champlain.
1609. Hudson River discovered by Henry Hudson.
1611. Lake Cnamplain discovered by Champlain.
1614. New York settled by the Dutch on Manhattan Island (now New York) and at Fort Orange (Albany).
1616. Tobacco first cultivated in Virginia.
1619. June 19, first colonial assembly in Virginia.
1620. Slaves first introduced into Virginia by the Dutch.
Nov. 10, the Mayflower anchors in Cape Cod harbor; first white child born in New England.
Dec. 11, landing of the Puritans at Plymouth.
1626. Maine and New Hampshire settled by the English. New Jersey settled by the Swedes and Dutch.
1628. Salem, Mass., founded by John Endicott.
1629. Charleston founded by the Massachusetts Bay Colony.
1630. Delaware settled by the Swedes and Finns.
1634. Maryland founded by Lord Baltimore.
1636. Hartford settled. Providence, R. I., founded by Roger Williams.
Harvard College founded.
1638. New Haven founded by Eaton and Davenport.
1639. First printing press set up at Cambridge, Mass., by Stephen Day.
1648. First execution for witchcraft.
1650. Harvard College chartered. Constitution of Maryland settled.
1663. Carolina granted to Lord Clarendon by Charles II.
1664. Aug. 29, New Amsterdam surrendered to the English and became New York.
1665. June 12, New York City incorporated.
1672. Charleston, S. C., founded. First copyright granted by Massachusetts.
1675. June 24, commencement of King Philip's war.
1681. Grant of Pennsylvania to William Penn.
1701. Yale College founded at Saybrook. Commencement of of Queen Anne's war.
1703. Culture of silk introduced into Carolina.
Duty of £4 laid on imported negroes in Massachusetts.
1704. First newspaper (Boston News Letter) published at Boston by Bartholomew Green.
1710. First Colonial post office at New York.
1712 Free schools founded at Charlestown, Mass.
1714. First schooner built at Cape Ann.
1717. New Orleans founded by the French.
1721. Inoculation for small-pox introduced into New England.
1725. First newspaper in New York (New York Gazette) published by William Bradford.
1729. North and South Carolina separated.
1732. Tobacco made a legal tender in Maryland at 1d per pound, and corn at 20d per bushel.
1733. Georgia settled by Oglethorpe.
1738. College founded at Princeton, N. J.
1742. Faneuil Hall erected at Boston by Peter Faneuil.
1743. King George's War begun.
1750. First theatrical performance in Boston.
1754. Columbia College in New York founded.
Beginning of the old French war.
1755. July 9, Braddock's defeat.
Sept. 8, Battle of Lake George.
1757. Fort William Henry taken by the French.
1759. Niagara, Ticonderoga and Crown Point taken by the English, in July.
Sept. 13, Battle on the Plains of Abraham; Wolf and Montcalm slain.
Sept. 18, Quebec surrenders to the English.
1773. Dec. 16, destruction of 342 chests of tea in Boston Harbor.
1775. Several ships of the line and ten thousand troops ordered to America.
April 19, Battle of Lexington.
Congress votes to raise an army of twenty thousand men.
June 15, George Washington appointed commander-in-chief of the American Army.
June 17, Battle of Bunker Hill.
July 12, Washington takes command of the army at Cambridge.
1776. March 17, the British evacuate Boston.
April, Washington removed his army to New York.
June 28, repulse of the British at Charleston.
July 4, Declaration of Independence.
Aug. 27, Battle of Long Island; the British victorious.
Washington abandoned New York City; the British take possession Sept. 15.
Oct. 28, Battle of White Plains.
Dec. 26, Battle of Trenton.
1777. Lafayette arrives from France with troops and supplies.
Congress gives him a major-general's commission, July 31.
Aug. 16, Battle of Bennington.
Sept. 11, Battle of Brandywine.
Oct. 17, surrender of the British army under Burgoyne.
1778. June 18, the British evacuate Philadelphia.
July 11, arrival of a French fleet under Count d'Estaing.
1780. May 12, surrender of General Lincoln and American army at Charleston.
Sept. 23, treason of Gen. Arnold, and arrest of Major Andre.
1781. Bank of North America established.
Oct. 19, surrender of Cornwallis and 7,000 troops at Yorktown.
1782. April 17, Holland acknowledges our independence.
Nov. 30, preliminaries of peace between the United States and Great Britain signed at Paris.
1783. Independence of United States acknowledged by Sweden, Feb. 5; by Denmark, Feb. 25; by Spain, March 24; and by Russia, in July.
April 11, peace proclaimed by Congress.
April 19, announced to the army by Washington.
Nov. 25, New York evacuated by the British.
1786. Shay's insurrection in Massachusetts.
1789. George Washington elected president. Inaugurated April 30th.
1793. Washington re-elected president.
1794. Insurrection in Pennsylvania.
1799. Dec. 14, death of Washington.
1800. Seat of government moved to city of Washington.
1804. Alexander Hamilton killed by Aaron Burr in a duel.
1807. Trial of Aaron Burr for treason.
1808. Jan. 1, the slave trade abolished.
1811. Nov 7, Battle of Tippecanoe.
1812. June 18 war declared against Great Britain.
1813. May 27, Battle of Fort George.
Sept. 10, Commodore Perry's victory on Lake Erie.
1814. Aug. 25, the British occupy the city of Washington and burn the capitol.
Sept. 11, Macdonough's victory on Lake Champlain
1815. Jan. 8, Battle of New Orleans.
March, war declared with Algiers.
1819. First steamship sailed for Europe.
1821. Gas first used for lighting streets in the United States at Baltimore.
1825. Oct. 26, Erie Canal completed.
1835. Dec. 16, great fire in New York.
Seminole war in Florida begun.
1841. April 4, death of General Harrison, John Tyler succeeds as president.
1846. May 13, proclamation of war existing with Mexico.

1846. Oct. 25, Tobasco in Mexico bombarded by Commodore Perry.
1847. Sept. 14, the American army enters the City of Mexico.
1848. Feb. 23, John Quincy Adams expires in the capitol at Washington.
1849. May 15, the cholera breaks out in New York.
1850. July 9, death of President Taylor at Washington.
July 10, Millard Fillmore takes the oath of office as president.
Sept. 18, fugitive slave bill passed.
1852. June 29, Henry Clay dies at Washington.
Oct. 24, Daniel Webster dies at Marshfield.
1853. July 14, crystal palace at New York opened.
1858. Aug. 5, news of the successful laying of the Atlantic telegraph cable is received throughout the country with great demonstrations of joy. The cable was placed in mid-ocean July 29; the Agamemnon reached Valencia, Aug. 4, and the Niagara Trinity Bay, Aug. 5.
1859. Oct. 6, John Brown's seizure of Harper's Ferry; he is captured and hung Dec. 2.
1860. May 18, Lincoln nominated by Republican convention at Chicago.
1861. Feb. 4, Seceders' convention at Montgomery, Ala.; call themselves "Confederate States of America," and adopt a constitution.
Feb. 14, Jeff. Davis made president of the confederates; they raise troops and arm for war.
April 14, Fort Sumter surrenders after two days' bombardment by the confederates.
1862. Feb. 16, Gen. Grant takes Fort Donelson with over 13,000 prisoners, after four days of tremendous fighting.
Feb. 22, Jeff. Davis inaugurated rebel president for six years.
March 9, battle between Monitor and Merrimac.
April 6 and 7, Battle of Shiloh.
May 31, Battle of Fair Oaks, McClellan's advance defeated severely by rebels.
June 6, great naval battle in the river before Memphis; Memphis surrendered on the same day to Commodore Davis.
July 1, Battle of Malvern Hill, last of the Seven Days' Battles; rebels repulsed, and the position on the James maintained. Total union losses in seven days, 15,244.
July 1, President Lincoln calls for 600,000 volunteers.
Aug. 29 and 30, Gen. Pope defeated at Bull Run after very heavy fighting, and falls back.
Sept. 16 and 17, battle of Antietam; rebels defeated.
Sept. 22, Emancipation Proclamation announced for Jan. 1, 1863.
Dec. 11–14, Battle of Fredericksburg.
Dec. 31, Battle of Stone River.
1863. Jan. 1, the definite Emancipation Proclamation issued.
May 1–5, Battle of Chancellorsville; indecisive, but great losses on both sides.
July 1–3, Battle of Gettysburg; Lee defeated and retreats at once southward.
July 4, unconditional surrender of Vicksburg and 31,000 men to Gen. Grant.
July 13–18, draft riots in New York city, several negroes tortured and hung by mob, and much burning and robbing; 1,300 rioters killed, and riots put down.
Sept. 19–20, Battle of Chickamauga.
Oct. 17, President Lincoln calls for 300,000 more men.
1864. March 17, Gen. Grant assumes command of all the armies of the U. S.
May 5–6, the tremendous battle of the Wilderness; resulting in Lee's retiring.
May 8–18, Battle of Spottsylvania.
June 1–4, Battle of Cold Harbor.
June 7, Mr. Lincoln renominated at Baltimore.
July 16, gold about this time at its highest in New York, viz., 284 per cent.
Aug. 5, Admiral Farragut's splendid victory in forcing his way into Mobile Harbor.
Nov. 8, Lincoln elected. Gen. McClellan resigns his commission.
1865. April 2, Grant attacks heavily along his whole line; Lee decisively defeated, Petersburg and Richmond evacuated at night and Davis flees.
April 9, Lee surrenders with his army of 26,115 men.
1865. April 14, Booth assassinates President Lincoln, and his confederate Payne tries to kill Mr. Seward; Mr. Lincoln dies at 7:22 next morning.
April 25, Booth discovered in a barn in Va., and refusing to surrender, is shot and dies in four hours.
May 10, Jeff. Davis captured in female disguise in Irwinsville, Ga.
July 7, the assassins Harold, Payne, Atzeroth and Mrs. Surratt hung at Washington; Arnold, Mudd, Spangle and McLaughlin imprisoned for life.
Dec. 18, the Secretary of State, Mr. Seward, officially declared slavery abolished throughout the United States, 27 States having ratified the Constitutional Amendment.
1866. July 4, extensive conflagration in Portland, Me., one-third of the city burnt and property amounting to $10,000,000.
July 27, laying of the Atlantic cable successfully completed.
1871. Oct. 8, the great Chicago fire in which more than 250 persons lost their lives, and destroyed property to the amount of $196,000,000.
1876. Centennial anniversary of American Independence at Philadelphia.
1881. July 2, President Garfield shot by Charles J. Guiteau at Washington.
Sept. 19, President Garfield died at Long Branch.
1885. July 23, President Grant died.
1886. Jan. 18, presidential succession established.
1887. Feb., Interstate Commerce Act passed.
1889. May 31, Johnstown flood.
1890. July 4, Idaho and Wyoming admitted as states.
1893. World's Fair at Chicago.
1894. July 4, Hawaii made a republic.
1895. Feb. 24, Cuban revolt began.
1897. Jan. 11, Anglo-American Arbitration Treaty signed.
July 24, Dingley Tariff Bill signed.
Nov. 8, Bering Sea Seal Treaty signed.
1898. Feb. 15, battleship Maine blown up in Havana Harbor
April 25, war declared against Spain.
May 1, Dewey's victory at Manila.
July 3, Naval battle of Santiago de Cuba.
July 17, Santiago de Cuba surrendered.
Aug. 12, Peace protocol signed.
Dec. 10, Philippines and Porto Rico ceded to the United States.
Dec. 12, Paris Peace Treaty signed.
1899. Jan. 1, Cuba under sovereignty of United States.
Feb. 4, Philippine-American war begun.
April 11, Philippines, Porto Rico and Guam formally acquired by the United States.
1900. Sept. 8, Galveston tornado.
1901. Feb. 21, Cuban Constitution signed.
Sept. 6, Assassination of President McKinley.
1902. April 30, Philippine-American war ended.
May 20, Cuban republic inaugurated.
Dec. 14, laying of Pacific cable begun at San Francisco.
1903. March 19, Cuban-United States Reciprocity Treaty ratified.
Oct. 17, Alaska boundary award made.
Nov. 3, Panama revolution.
1904. Feb. 26, Panama Canal Zone formally acquired by the United States.
1906. April 18–20, San Francisco earthquake and fire.
Sept. 29, President Palma of Cuba and cabinet resigned and American control established.
1907. Nov. 16, Oklahoma and Indian territory admitted to Union as State of Oklahoma.
Dec. 16, 1907 to Feb. 22, 1909, American battleship cruise around the world.
1908. June 24, Grover Cleveland died.
Oct. 1, postage between United States and Great Britain reduced to two cents.
1909. Jan. 28, American control of Cuba relinquished.
April 6, North Pole discovered by Commander Robert E. Peary.
1910. June 1, fisheries (Altantic) dispute settled by Hague.
1911. Jan. 3, postal banks established in United States.
1912. Feb. 14, Arizona and New Mexico admitted as states.
Aug. 6, Formation of the Progressive political party.
1913. March 25-31, Great Ohio and Indiana floods.

THE PANAMA CANAL

The Panama Canal is practically completed although the official opening has been set for Jan. 1, 1915. All of the excavation work has been finished—about 250,000,000 cubic yards removed—and water has been let into the big ditch. Events are happening so fast now concerning this new waterway that it is impossible to chronicle them and keep the story up to date in an annual book of this kind.

The canal will bring many shores thousands of miles nearer to American Ports. A glance at the map shows that Valparaiso, on the western coast of Chile, is almost precisely south of New York. The western coast of South America makes almost a straight line with the eastern coast of North America. With the opening of the Panama Canal, steaming south in almost a straight line, passing through the isthmus and so down the west coast, a ship from New York could touch at the great ports of western South America.

Through the canal to Valparaiso the distance will be 4,633 miles. At present Wellington, by way of the Straits of Magellan, is 11,344 miles from New York. From Liverpool by the Straits it is 11,711, and by the canal it will be even further, 12,052 miles. Melbourne is 1,508 miles from Wellington, and thus Melbourne is brought nearer to New York than it is to Liverpool.

The probable traffic of the Panama Canal has been estimated by comparisons with the Suez Canal.

In 1912, 5,373 ships, having a net tonnage of 20,275,000 tons, passed through the Suez waterway. The growth of tonnage in ten years has been more than 70 per cent.

The shipping using the Panama Canal annually during the first year or two of its operation, that is, in 1915 and 1916, will amount to about 10,500,000 net tons. At the end of ten years the tonnage will doubtless have reached 17,000,000 net tons. The prospect thus is that the Panama Canal will start with less than half the tonnage which will then be making use of the Suez Canal. Moreover, it will be a long time before the Panama Canal catches up with the Suez waterway in volume of traffic. Should the Suez tonnage continue to increase at the present rate, the volume of shipping served by the Suez Canal in 1825 will be double that passing through the Panama waterway. It is hardly probable that the Suez tonnage will continue to increase at its present high rate, while it may well happen that the stimulating effect of the Panama Canal upon industry and trade has been underestimated. Eventually, at the end of two or three decades, let us say, the traffic at Panama may equal or exceed that at Suez.

The Panama Canal is always thought of, first of all, with reference to the commerce between the two seaboards of the United States: yet it is probable that only one-tenth of the ships that pass through the canal in 1915 will be employed in the intercoastal trade.

GOVERNMENT OF CANAL ZONE

In 1912 Congress passed a so-called Panama Canal Act providing for the opening of the canal and its subsequent maintenance and operation.

The Panama Act first of all defines the Canal Zone as a strip of land extending across the isthmus from ocean to ocean along the line of the canal, being ten miles in width, five miles on each side of the canal. The cities of Colon and Panama, being integral portions of the Republic of Panama, were not included in the original cession by virtue of the treaty ratified February 26, 1904, between the United States and Panama, and are therefore excepted.

All rules in force during the period of construction, established for the government of the Zone, are confirmed and have the force of law until changed by Congress.

The President is empowered to appoint a governor at a salary of $10,000.00 a year, whose appointment shall be confirmed by the Senate. He may also appoint minor officials and has full power of removing all canal officials, including the governor. The governor shall supersede the present Isthmian Canal Commission. This, of course, will not be done until the actual completion of the work.

The question of tolls forms one of the most important parts of the act and has been one of the most bitterly disputed parts of the new law. It has been claimed by England that under the Hay-Pauncefote treaty vessels of all nations should be treated alike and that this includes those of the United States. The act provides, nevertheless, that American coastwise vessels shall be exempt from the payment of tolls.

The law then goes on to authorize the President to fix the amount of the tolls, but they cannot be changed by him except upon six months' notice given by proclamation. The tolls will be based on the tonnage of the vessels and warships may have to pay a different rate from ships of commerce. When based upon net registered tonnage for ships of commerce the tolls shall not exceed one dollar and twenty-five cents a ton. The toll for each passenger shall not exceed one dollar and fifty cents. The tolls are designed to pay for the operation and maintenance of the canal and ultimately its cost. The President is authorized to make all necessary rules for the actual operation of the canal and the passage of vessels through it, including the use of the locks, pilotage, and the like.

He may also establish a workingmen's compensation ordinance providing for the compensation of canal employees or employees of the Panama Railroad who may meet with injury or disability.

He can also establish wireless telegraph stations, in the operation of which public messages shall receive preference. Dry docks, shops, storehouses, coaling stations, and other facilities are also authorized.

The act then makes further provision as to the President's civil authority and that of the governor, and courts, both civil and criminal are provided for. The principal court is called the District Court and appeal lies from it to the Circuit Court of Appeals, to the fifth circuit of the United States and thence to the Supreme Court of the United States.

The Governor may make rules with the force of penal laws regulating the right of persons to make use of the canal or forbidding them to trespass within the Canal Zone. Any one tampering with the locks or other parts of the canal for the purpose of injuring them or obstructing the canal, may be punished by a fine of $10,000.00 or imprisonment for twenty years or both. And if such unlawful act causes the death of any one, the person so convicted shall be guilty of murder.

At the end of the act, are still other provisions which have raised much discussion. The powers of the Interstate Commerce Commission are increased generally over carriers by water. No vessel owned by a railroad competing with the canal or by any corporation violating the Anti-Trust Act may use the canal. The law also permits foreign-built ships owned by Americans henceforth to have American registry provided they are to be used only in the foreign trade and are not over five years old.

PANAMA CANAL TOLLS

Following is President Taft's proclamation regarding the tolls for the Panama Canal, issued November 13, 1912:

"I, William Howard Taft, President of the United States of America, by virtue of the power and authority vested in me by the act of Congress approved August 24, 1912. to provide for the opening, maintenance, protection, and operation of the Panama Canal and the examination and government of the Canal Zone, do hereby prescribe and proclaim the following rates of toll to be paid by vessels using the Panama Canal.

"1. On merchant vessels carrying passengers or cargo, one dollar and twenty cents ($1.20) per net vessel ton—each one hundred (100) cubic feet —of actual earning capacity.

"2. On vessels in ballast without passengers or cargo, forty (40) per cent. less than the rate of tolls for vessels with passengers or cargo.

"3. Upon naval vessels other than transports, colliers, hospital ships and supply ships, fifty (50) cents per displacement ton.

"4. Upon army and navy transports, colliers, hospital ships and supply ships, one dollar and twenty cents ($1.20) per net ton, the vessels to be measured by the same rules as are employed in determining the net tonnage of merchant vessels.

"The Secretary of War will prepare and prescribe such rules for the measurement of vessels and such regulations as may be necessary and proper to carry this proclamation into full force and effect."

STATISTICS OF THE WORLD

Area	196,900,000 sq. miles
Area of land	52,372,000 sq. miles
Area of fertile land	28,270,000 sq. miles
Population	1,610,000,000 souls
Age of earth	40 to 100 million years
Distance from Sun	93,000,000 miles
Equatorial diameter	7,926.5 miles
Equatorial circumference	24,902 miles
Polar diameter	7,809.5 miles
Density compared with water	5.55

Continental Area and Population

Continent	Area in sq. miles	Population	
		Number	Per sq. mi.
Africa	11,515,000	130,000,000	11.
America, N.	9,323,000	115,000,000	12.
America, S.	6,889,000	45,000,000	6.
Asia	17,057,000	900,000,000	53.
Australasia	3,456,000	5,500,000	1.
Europe	3,879,000	414,500,000	107.
Polar Regions	253,000	.....	....

Approximate Area of the Largest Countries

1. British Empire	11,450,000 sq. miles
2. Russia (and possessions)	8,500,000 sq. miles
3. France (and possessions)	4,330,000 sq. miles
4. China (and possessions)	4,300,000 sq. miles
5. United States (and possessions)	3,750,000 sq. miles

Ocean Depth and Area

The oceans, including the inland seas connected with them, cover about 144,500,000 sq. miles, or 73.39% of the total surface.

Ocean	Greatest Depth	Area
Atlantic	27,366 feet	34,000,000 sq. miles
Pacific	31,000 feet	71,000,000 sq. miles
Indian	18,582 feet	28,000,000 sq. miles
Arctic	9,000 feet	4,000,000 sq. miles
Antarctic	25,200 feet	7,500,000 sq. miles

The greatest ocean depth is approximately the same as the greatest land height, but the average depth of the sea floor is about 12,000 feet, while the average land height above the sea is only 2,300 feet. The maximum depth in the Pacific is near the island of Mindanao and that in the Atlantic off the coast of Porto Rico.

Population by Races

Division	Color	Section	Est. Population
Mongolian	Yellow	Asia	685,000,000
Caucasian	White	Europe & America	650,000,000
Negro	Black	Africa	160,000,000
Semitic	White	North Africa	50,000,000
Malayan	Brown	Australasia, inc. Malay Peninsula	50,000,000
Indian	Red	America, N. and S.	15,000,000

Population by Religion

Christian	559,000,000
Catholic	270,000,000
Protestant	174,000,000
Greek Church	110,000,000
Abbysinian Church	3,000,000
Armenian Church	1,700,000
Others	300,000
Hindooism	206,000,000
Mohammedanism	243,000,000
Buddhism	450,000,000
Polytheism	142,000,000
Jewish Religion	10,000,000

Of the total population of the world, about one-third are Christians.

Proportion of Women

In Europe, there are 1,000 men to 1,027 women; in Africa, 1,000 men to 1,045 women; in America, 1,000 men to 964 women; in Asia, 1,000 men to 961 women; in Australia, 1,000 men to 937 women.

The highest proportion of women is found in Unganda, where there are 1,467 to every 1,000 men. The lowest proportion is in Alaska and the Malay States, where there are in the former 391 and in the latter 389 to every 1,000 men.

Largest Cities in the World

City	Country	Population
London	England	4,523,000
Greater London	England	7,252,963
New York	United States	4,766,883
Paris	France	2,888,110
Tokyo	Japan	2,186,079
Chicago	United States	2,185,283
Berlin	Germany	2,071,257
Vienna	Austria	2,031,468
St. Petersburg	Russia	1,907,708
Philadelphia	United States	1,549,008
Moscow	Russia	1,481,200
Constantinople	Turkey	1,125,000
Osaka	Japan	995,945
Canton	China	1,250,000
Buenos Aires	Argentina	1,333,532
Calcutta	India	1,222,313
Peking	China	1,077,209

Principal Languages of the World

	Tongues		Tongues
English	150,000,000	Spanish	55,000,000
German	120,000,000	Italian	40,000,000
Russian	90,000,000	Portuguese	30,000,000
French	60,000,000		

There are approximately 3,500 languages or dialects in the world. The English has grown faster than any other language during the past century.

Highest Structures in the World

	Feet
Eiffel Tower, Paris	984
Woolworth Building, New York City	750
Metropolitan Building, New York City	700
Singer Building, New York City	612
Municipal Building, New York City	560
Washington Monument, Washington, D. C.	555
City Hall, Philadelphia, Pa.	549
Bankers' Trust Co. Building, New York City	539
Cologne Cathedral, Cologne, Germany	501
Pyramid of Cheops, Memphis, Egypt	450
St. Peter's, Rome, Italy	391
Park Row Building, New York City	386
St. Paul's, London, England	366
Times Building, New York City	363
Milan Cathedral, Milan, Italy	360

World's Postal Statistics
(From Annual Reports)

Country	Letters and Post Cards	No. of Post Offices
United States	8,000,000,000	59,239
United Kingdom	4,000,000,000	24,000
Germany	4,000,000,000	50,500
Austria-Hungary	1,500,000,000	16,000
France	1,350,000,000	13,000
Japan	1,200,000,000	7,000
Russia	1,000,000,000	15,000
India	750,000,000	19,500
Canada	500,000,000	12,800
Italy	400,000,000	10,000
Argentina	350,000,000	3,000
Australia	320,000,000	7,750
Switzerland	270,000,000	4,100

World's Crops

The latest statistics of total crops raised per year on the earth are:

Corn	3,672,636,000 bu.	Barley	1,385,245,000 bu.
Wheat	3,626,336,000 bu.	Oats	4,410,686,000 bu.
Rye	1,675,898,000 bu.	Cotton	19,171,000 bales
Tobacco	2,595,247,000 lbs.	Potatoes	5,523,864,000 bu.
Sugar	35,498,809,920 lbs.		

Height of Famous Mountain Peaks

Asia	Everest	29,002 feet
	Godwin-Austen	28,865 feet
	Kinchinginga	28,156 feet
	Bride Peak	25,100 feet
South America	Aconcagua	23,080 feet
	Mercidario	22,315 feet
	Tupunagato	21,550 feet
	Illampu	21,490 feet
	Cotopaxi	19,612 feet
North America	McKinley	20,498 feet
	Logan	19,539 feet
	Rainier	14,526 feet
	Whitney	14,499 feet
Europe	Elbruz	18,347 feet
	Mont Blanc	15,781 feet
	Matterhorn	14,709 feet
	Jungfrau	13,761 feet

World's Longest Rivers

River	Outlet	Length in Miles
Amazon	Atlantic	4,200
Nile	Mediterranean	3,800
Yenisei	Arctic Sea	3,200
Yangtse	North Pacific	3,300
Missouri & Mississippi	Gulf of Mexico	3,200
Ob	Arctic Sea	3,200
Congo	Atlantic	2,900
Niger	Gulf of Guinea	2,700
Amur	Sea of Okhotsk	2,700
Hoang	Yellow Sea	2,500
Volga	Caspian Sea	2,300
Mackenzie	Beaufort Sea	2,400
La Plata	South Atlantic	2,300
Yukon	Behring Sea	2,000
St. Lawrence	Gulf of St. Lawrence	2,300

Famous Waterfalls of the World

Name and Location	Height in Feet
Gavarnie, France	1,385
Grand, Labrador	2,000
Minnehaha, Minnesota	50
Missouri, Montana	90
Montmorenci, Quebec	265
Multnomah, Oregon	850
Murchison, Africa	120
Niagara, New York-Ontario	164
Rjukan, Norway	780
Schaffhausen, Switzerland	100
Skjaeggedalsfos, Norway	530
Shoshone, Idaho	210
Staubbach, Switzerland	1,000
Stirling, New Zealand	500
Sutherland, New Zealand	1,904
Takkakaw, British Columbia	1,200
Twin, Idaho	180
Yellowstone (upper), Montana	110
Yellowstone (lower), Montana	310
Ygnassu, Brazil	210
Yosemite (upper), California	1,436
Yosemite (middle), California	626
Yosemite (lower), California	400
Vettis, Norway	950
Victoria, Africa	400
Voringfos, Norway	600

World's Greatest Lakes

Chad	50,000 sq. miles	Huron	23,800 sq. miles
Superior	31,200 sq. miles	Michigan	22,450 sq. miles
Vict. Hyanza	26,500 sq. miles		

World's Largest Islands

Greenland	750,000 sq. miles	Madagascar	228,000 sq. miles
New Guinea	330,000 sq. miles	Sumatra	160,000 sq. miles
Borneo	280,000 sq. miles	Gr. Britain	88,000 sq. miles

WORLD'S LARGEST ISLANDS—Continued.

Australia, of course, is the largest island of all, with an area of nearly 3,000,000 sq. miles, but Australia is now generally considered to be a continent.

Railways of the World *

Old World	Miles	New World	Miles
Europe	207,488	North America	283,511
Asia	63,341	South America	43,638
Africa	22,905	Australasia	19,275
	293,734		346,424

A total of 640,158 miles for the whole globe, which is a gain of 14,460 miles in one year, of which increase 6,221 miles were in the Old World and 8,239 in the New.

In 1840 there were only 4,772 miles of railroad. In the last 10 years, 149,092 miles have been built. Thirty per cent. of the railroads are government owned or controlled—107,746 miles in Europe, 36,365 in Asia, and 18,036 miles out of the 19,275 miles in Australasia.

Miles of Telegraph Line

Country	Miles	Country	Miles
United States	225,000	Argentina	38,000
Russia	126,559	Mexico	22,000
Germany	142,020	Brazil	36,199
India	74,828	Italy	35,000
France	113,583	Turkey	28,000
Austria-Hungary	44,100	Spain	26,441
United Kingdom	61,296	China	29,327
Canada	42,312		
Australia	44,100	The World	1,355,694

In proportion to the number of people, New Zealand and Australia have the most telegraph lines.

Ocean Cables

Ownership	Miles	Ownership	Miles
British	160,000	German	10,000
United States	50,000	Other Nations	12,000
French	25,000		
Danish	11,000	Total	268,000

The first ocean cable was laid across the English Channel between Dover and Calais in 1850.

Telephones in the World

Country	Miles of Wire	Stations
United States	17,017,393	7,659,475
German Empire	3,121,000	1,006,800
Great Britain	2,047,680	639,900
Canada	568,746	284,373
France	830,520	230,700
Sweden	223,200	186,000
Russia and Finland	318,500	172,900
Japan	222,098	117,394
Austria	302,000	111,880
Denmark	229,600	95,700
Switzerland	210,600	78,000
Italy	144,600	72,300
Norway	119,400	54,300
Spain	55,660	25,300
Elsewhere	1,233,370	500,965
Total	26,644,367	11,235,987

World's Longest Bridges

Name	Location	Length Miles	Length Yds.
Tay	Scotland	2	73
Ohio	Illinois	2	—
Forth	Scotland	1	1,005
Missouri	Missouri	1	784
Queensborough	New York	1	1,107
Williamsburgh	New York	1	213
Manhattan	New York	1	520
Victoria	Montreal	1	413
Susquehanna	Maryland	1	345
Brooklyn	New York	1	78

Plans of the proposed bridge across San Francisco Bay to Oakland have been filed with the Board of Supervisors in San Francisco. It will be 3 miles long. The total suspension will be 5,946 yards. The estimated cost is $26,000,000.

* From the *Archiv fur Eisenbahnwesser.*

Longest Tunnel in the World

The Russian Government is planning the longest tunnel in the world. It is to be fifteen miles long and, with other facilities, will connect Tiflis and Vladikavkas, the latter place being a town in Ciscaucasia. The two places are only 125 miles apart, and at the present time a roundabout journey of 940 miles is necessary in order to go from one place to the other.

Leading Art Galleries of the World

EUROPE

Louvre, Paris; Dresden Gallery, Dresden; Vatican, Rome; Uffizi, Florence; Piti Gallery, Florence; Museo del Prado, Madrid; National Gallery, London.

AMERICA

Corcoran Art Gallery, Washington, D. C.; Metropolitan Museum of Art, New York, N. Y.

The World's Most Famous Diamonds

Name	Carats
Cullinan	3,025
D'Angleterre (blue)	44¼
Etoile Polaire	40
Etoile du Sud	124
Grand Duc de Toscane	133.16
Great Mogul	279 3/16
Imperatrice Eugenie	51
Kohinoor (first cutting)	279
Kohinoor (second cutting)	106 1/16
Loterie d'Angleterre	49
Nassak	78 5/16
Orloff	194¾
Pacha d'Egypt	40
Regent	136¾
Sancy	53½
Shah	86
Tiffany	969
Tiffany (yellow)	125

Famous Streets of the World

Berlin—Unter den Linden.
Buenos Aires—Avenida de Mayo.
Chicago—State Street.
City of Mexico—Paseo de la Reforma.
Cleveland—Euclid Avenue.
Dublin—Sackville Street.
Edinburgh—Princes Street.
London—Fleet Street and the Strand.
Madrid—Paseo del Prado.
Munich—Ludwigstrasse.
New Orleans—Canal Street.
New York—Broadway.
Paris—Avenue des Champs Elysees.
Philadelphia—Chestnut Street.
Rio de Janeiro—Avenida Central.
Rome—The Corso.
San Francisco—Market Street.
St. Petersburg—Nevski Prospect.
Vienna—Ringstrasse.
Washington—Pennsylvania Avenue.

World's Most Noted Bells

The most costly set of chime bells probably in the world are those hung 642 feet above the earth in the Metropolitan Tower, New York City. The four bells, weighing 20,000 pounds, cost approximately $30,000.

The greatest value in any single bell of the present century is represented in the Columbian Liberty Bell, cast in the summer of 1893 for the World's Fair, at Chicago. It is estimated that more than 200,000 men, women and children contributed to this bell in some way, the bell weighing 13,000 pounds and representing the 13 original States. Many offerings were in the form of heirlooms of precious metal and relics from the Civil and Revolutionary wars.

The cost of the modern bell does not compare with some of those cast in ages past. "Tsar Kolokol" (the great bell of Moscow) weighs 492,800 pounds. The bell material alone cost $340,000, while it is said that more than $1,000,000 in precious stone and plate were used in its composition. The "Great Bell of China," in Pekin, weighs 120,000 pounds. "Great Tom," Oxford's famous bell, weighs 16,000 pounds; while the heaviest bell in America, in the Cathedral of Montreal, weighs 28,560 pounds.

World's Largest Telescope (100 inch)

The world's largest telescope will soon be in place at Mount Wilson in California observatory. Stars three times farther than the most distant one now known will be visible. This lens will be 13 inches thick and weigh four and one-half tons. Galileo's little telescope increased the seeing power of the human eye about 130 times; the new telescope will increase it 250,000 times. It will probably make visible stars whose light traveling at the rate of 186,300 miles per second requires 150,000 years to reach the earth.

Governments of the World

Of the 55 principal countries of the world, 24 are governed as limited monarchies, 25 have a republican form of government, and 6 are under an absolute monarchy. China was the last to change from an absolute monarchy to a republic.

Study of the World

Geology—Study of Earth's Crust.
Geodosy—Study of Earth's Measurements.
Geography—Study of Earth's Surface.
Physiography—Study of Earth's Superficial Features.
Oceanography—Study of the Oceans.
Limnology—Study of the Lakes.
Orography—Study of the Mountains.
Ethnology—Study of the Races.
Ethnography—Study of Habitation of Races.
Biology—Study of Organic Life.
Palæontology—Study of Extinct Organic Life.

Around the World in Thirty-five Days

The world's record for globe-girdling, 39 days, 19 hours, 43 minutes, and 37 4-5 seconds, set by Andre Jaeger-Schmidt of the Paris paper Excelsior in 1911, was broken by 3 days, 22 hours, and 37 seconds on August 6, 1913, when John Henry Mears arrived at the *New York Sun* office, completing the circuit of the world he had begun under the auspices of that paper a few minutes before 1 o'clock on the morning of July 2. Mears made the world trip of 21,066 miles in 35 days, 21 hours, 43 minutes, and 4-5 second, traveling at an average rate of 587 miles a day, or 24 1-2 miles an hour. Jaeger-Schmidt had traveled 19,300 miles at an average daily rate of 480 miles, or 20 miles an hour.

SHIP CANALS OF THE WORLD

Canal.	Date of opening	Length (miles).	Depth (feet).	Width (feet) Top.	Width (feet) Bottom.
Amsterdam, connecting Zuider Zee with North Sea	1877	16.5	23	197	89
Corinth, connecting Gulf of Corinth with the Gulf Ægina	1893	4	26.2	——	72
Cronstadt, St. Petersburg	1885	17.5	22	——	200
*Erie, from Buffalo to Albany	1825	352	9	70	56
Kaiser Wilhelm, connecting North Sea and Baltic	1895	61.3	29.5	220	72
Manchester Ship Canal, connecting Manchester, England, with the Mersey River, Liverpool, and the Atlantic Ocean	1894	35.5	26	175	120
Panama, extending from Colon to the city of Panama and connecting the Atlantic and Pacific	1914	50.5	41	1,000 to 300	649 to 300
Sault Ste. Marie, connecting the waters of Lake Superior with those of the St. Mary's River and Lake Huron	1896	2	21	——	160
Suez, connecting the Mediterranean with the Red Sea	1869	100	31	420	262

*The canal is in the course of being enlarged to accommodate boats of 1,000 tons burden, and to this end it is to be made 12 feet deep, 75 feet wide at the bottom and 122 feet at the surface.

EXPLORATIONS AND DISCOVERIES

Year	Explorer and Nationality	Discovery or Exploration
B.C.		
500	Himilco (*Carthage*)...	Atlantic coast of Europe. May have extended to Sargasso Sea.
500	Hecatæus (*Miletus*)..	Writes the first geography.
470	Hanno (*Carthage*)....	Leads a colonizing expedition to West Africa as far as Cape Palmas.
330	Pytheas (*Massilia*)...	Coast of Spain, Gaul, and Great Britain.
332–326	Alexander the Great (*Macedonia*).....	Occupies Egypt and founds Alexandria 332; invades India 326.
325	Nearchus(*Macedonia*)	Sails from the Indus to the Euphrates.
218	Hannibal (*Roman*) ..	Crosses the Alps.
about 120	Eudoxus of Cnidus (*Greek*).....	Attempts circumnavigation of Africa.
61–48	Julius Cæsar (*Roman*)	Leads expeditions into Gaul, Germany, and Britain.
15	Tiberius (*Roman*)....	Discovers the Lake of Constance.
A.D.		
84	Agricola (*Roman*)....	Circumnavigates Great Britain.
150	Claudius Ptolemy.... (*Egypt.*).....	Issues his "Syntaxis," asserting that the sun and stars revolve around the earth; calculates circumference of the globe.
861	Norsemen.....	Faroe Islands. North Cape of Europe rounded.
865	Naddod (*Norse*).....	Discovers Iceland.
876	Gunnbjörn (*Norse*)..	Sights Greenland coast.
982	Eric the Red (*Norse*)	Discovers and names Greenland.
1000	Leif Ericson (*Norse*).	Discovers Newfoundland (Helluland), and coast of New England (Vinland).
1154	Idrisi (*Arab.*).....	Produces a description of the world, very important in the history of geography.
about1200	Arabs.....	Trading merchants discover Siberia.
1253	Ruysbroek.....	Reaches Karakorum, the ancient seat of the Mongol Empire.
1271–1295	Marco Polo (*Venet.*).	Travels in Central Asia, India, Persia. First to travel in China.
1325–1352	Ibn Batuta (*Arabian*)	Travels through N. Africa, E. Africa, S. Russia, Arabia, India and China.
1336	Sir John Mandeville (*Eng.*).....	Travels in India.
1474	Toscanelli (*Italian*)..	Sends Columbus his map showing the western route to China.
1485	Diego Cam (*Port.*)...	Mouth of the Kongo reached.
1487	Bartholomew Dias (*Port.*).....	Rounds Cape of Good Hope to a point beyond Algoa Bay.
1492–1494	Columbus (*Genoan*)..	Oct. 12, discovers the West Indies; Nov. 3, 1493, on second voyage discovers Dominica, Porto Rico and several of the Windward group of islands; May 3, 1494, Jamaica is discovered.
1497	Amerigo Vespucci....	Discovers Venezuela and the continent of So. America.
1497	John Cabot (*Anglo-Venetian*).....	Sails along the N. E. coast of America, discovering Cape Breton Islands and Nova Scotia.
1498	Vasco da Gama (*Port.*)	Route to India by Cape of Good Hope
1498	Sebastian Cabot (*English*).....	Explores American coast from Gulf of St. Lawrence to Chesapeake Bay.
1498	Columbus (*Genoan*)..	July 31, Trinidad Islands discovered; August 1, enters mouth of Orinoco River.
1499	Ojeda (*Italian*).....	Discovers Gulf of Venezuela and New Granada.
1500	Vincente Pinzen (*Spanish*).....	Discovers mouth of the Amazon.
1500	G. Cortereal (*Port.*)..	Reaches entrance of Hudson Strait, called by him Strait of Aniam; explores Labrador.
1501	Pedro Alvarez Cabral (*Port.*).....	Explores coast of Brazil, which he names Santa Cruz.
1502	Amerigo Vespucci (*Genoan*).....	Discovers Bay of Rio de Janeiro.
1502	Columbus (*Genoan*)..	Visits Central America on his fourth voyage; discovers Martinique.
1513	Ponce de Leon (*Span.*)	Discovers Florida and sails up the west coast of the Peninsula.
1513	Balboa (*Spanish*)....	Crosses Isthmus of Panama and discovers the Pacific Ocean.
1516	Juan Solis (*Span.*)...	Enters and explores the Rio de la Plata.
1518	Juande Grijalva.....	Discovers east coast of Mexico.
1519–1521	Cortez (*Spanish*).....	Conquest of Mexico.
1519–1521	Magellan (*Spanish*)..	First to circumnavigate the globe. Passes through Strait of Magellan; crosses the Pacific and discovers the Philippines.
1523	Davila Gonzales.....	Discovers the lakes of Nicaragua.
1524	Giovanni Verrazano (*Italian*).....	Explores coast of N. Carolina, Maryland, New Jersey and New York.
1524–1535	Jacques Cartier (*French*).....	Explores Gulf of St. Lawrence; ascends river to Montreal.
1534	Pizarro (*Spanish*)....	Completes the conquest of Peru.
1539	Francesco de Ulloa..	Explores Gulf of California, and proves that Lower California is a peninsula.
1541	Francisco de Orellana (*Spanish*).....	Explores part of the Amazon River.
1541	De Soto (*French*)....	Discovers the Mississippi River.
1542	Antonio de Mota....	First reaches Japan.
1576	Frobisher (*English*)..	Explores Labrador and Baffin Bay; discovers Frobisher Bay.
1577–1580	Sir Francis Drake (*English*).....	Second circumnavigation of the globe; explores west coast of North America as far as Oregon.
1585	John Davis (*Eng.*)...	Discovers Davis Strait in looking for Northwest Passage.
1592	John Davis (*Eng.*)...	Discovers the Falkland Is.
1595	Sir Walter Raleigh (*English*).....	Explores Guinea and ascends the Orinoco 400 miles.
1596	William Barents.....	Spitsbergen, Nova Sembla, Barents Sea.
1598	Mendaña de Neyra (*Spanish*).....	Discovers Marquesas Islands
1606	Queiros (*Spanish*)....	Discovers the New Hebrides.
1606	Torres (*Spanish*)....	Discovers Torres Strait.
1608	Champlain (*French*)..	Discovers Lake Ontario.

Year	Explorer and Nationality	Discovery or Exploration
1608	James Smith (*Eng.*)..	Explores Chesapeake Bay and its tributaries.
1609–1610	Henry Hudson (*Eng.*)	Explores Hudson River and Hudson Bay.
1610	Sir Thomas Smythe (*English*).....	Discovers Delaware Bay.
1614–1617	Spillbergen (*Dutch*)?.	Circumnavigation of the globe.
1616	Wm. Baffin (*Eng.*) ..	Enters Baffin Bay on quest of Northwest Passage.
1616	Willem Schouten and Isaac Le Maire...	First to double Cape Horn.
1616	Dirk Hartog (*Dutch*)	Surveys port of west coast of Australia and visits Shark Bay.
1631	Fox.....	Discovers Fox Channel; touches Cape Peregrine.
1642	Abel Tasman (*Dutch*)	Van Dieman's Land (Tasmania) and New Zealand.
1644	Abel Tasman (*Dutch*)	Discovers Gulf of Carpentaria.
1660	French.....	The St. Lawrence Lake region discovered.
1673	Marquette and Joliet	Exploration of Mississippi from the north.
1679	French.....	Exploration of the Great Lakes and the Mississippi.
1681	La Salle (*French*)....	Explores lower Mississippi and takes possession for Louis XIV.
1701	Father Kino.....	Makes explorations in California.
1728	Behring (*Dane*).....	Discovers Behring Strait and proves that Asia and America are not connected.
1725–1743	Russians.....	Explore the coast of Siberia.
1742	Behring (*Dane*).....	Explores northwest coast of America to lat. 69° N.
1768–1775	Capt. Cook (*Eng.*) ..	Hydrographical surveys of the Society Islands, Sandwich Islands, east coast of Australia, Cook Strait in New Zealand, etc.
1770–1773	James Bruce (*Scot.*) .	Reaches source of the Blue Nile; explores Syria and Abyssinia.
1770	Liakhov (*Russian*) ..	Discovers new Siberian Islands.
1778	Capt. Cook (*Eng.*) ..	Antarctic Ocean to lat. 71° 15′ S.
1785–1788	La Perouse (*French*).	North of Japan; discovers Strait of Perouse.
1789–1793	Alex. Mackenzie (*Scot.*)	Exploration of Mackenzie River; first to make overland trip to Pacific Coast.
1792	George Vancouver (*English*).....	Vancouver Island circumnavigated; exploration of Gulf of Georgia.
1795–1796	Mungo Park (*Scot.*)..	Explorations in the Niger districts as far as Bammaku.
1801–1804	Matthew Flinders (*English*).....	Southern coasts of Australia.
1803–1806	Adam Krusenstern (*Russian*).....	Surveys in Sea of Japan and Sea of Okhotsk; circumnavigates the world.
1819	Sir E. Parry (*Eng.*)..	Parry Archipelago.
1823	Wrangle (*Russian*)...	Discovers Wrangle Land, and explores Arctic regions.
1823	Denham and Clapperton (*English*)...	Explore south end of Lake Chad.
1825–1826	A. G. Laing (*Scot.*) ..	Reaches Timbuktu from Tripoli.
1827–1828	René Caillie (*French*)	Journey from Kakandy to Timbuktu and Morocco.
1830	Chas. Sturt (*Eng.*) ..	Discovers the Murray River and Lake Alexandrina, Australia.
1830–1832	Biscoe (*English*).....	Enderby Land and Graham Land.
1831	Sir J. C. Ross (*Eng.*)	Magnetic North Pole plotted.
1832	Laird and Oldfield (*Scot.*).....	Exploration of the Niger and Benué.
1833–1835	Sir Geo. Back (*Eng.*)	Great Fish River or Back River in the Arctic.
1835	Sir F. Schomburgk (*German*).....	Explorations in British Guiana.
1837–1840	D'Urville (*French*)...	Adélie Land. Reaches 66° 30′ S. lat.
1839	J. Balleny (*English*)..	Balleny Islands, 66° 44′ S. lat.
1839–1841	Edward John Eyre (*English*).....	Explores Australia and discovers Lake Torrens. In 1841 journeys from Adelaide to King George's Sound.
1840	Trummer.....	Remains of ancient Nineveh.
1841	Sir James C. Ross (*English*).....	Victoria Land, with volcanoes Erebus and Terror.
1844–1845	Leichhardt (*German*)	Crosses Australia, from Moreton Bay to South Africa.
1846	Sir John Franklin....	Penetrates to within twelve miles of the northern extremity of King William's Land.
1849–1873	David Livingstone (*Scot.*)	Discovers Lake Ngami 1849; explores Zambesi and Kuanza basins to Loanda 1851-1854; discovers Victoria Falls 1855; discovers Lakes Shirwa and Nyassa 1858-1859; explores many smaller bodies of water tracing their sources, also the cannibal country, 1860-1873.
1850–1855	Richardson & Barth (*English*).....	From Tripoli explores plateau of Hammanda
1850	Sir R. M'Clure(*Irish*)	Discovers North-West Passage.
1852–1854	Sir C. R. Markham (*English*).....	Explorations in Peru.
1856–1859	Du Chaillu (*French*)	Botanic and zoologic explorations of basin of Ogowé River, W. Africa.
1858	Sir Richard Burton (*English*).....	Lake Tanganyika.
1858	Speke and Grant (*English*).....	Victoria Nyanza.
1861	Sir Samuel Baker (*English*).....	Explores Upper Nile; discovers Albert Nyanza in 1864.
1862	M'Douall Stuart (*Scot.*)	Crosses Australia from south to north.
1865–1866	G. Rohlfs (*German*)..	Journey from Tripoli to Lagos, exploring many lakes and oases.
1867–1872	Ferd. Richthofen (*German*).....	Extensive travel and exploration in China, Japan and Siam.
1868–1871	Georg Schweinfurth (*German*).....	Exploration of the Jur, Niam-Niam, and Monbuttu countries, discovering the Welle River.
1869–1874	Gustav Nachtigal (*German*).....	Explorations in Lake Chad region and Central Sudan States.
1871	Charles Hall (*U. S.*)..	Sails from New London in the Polaris in search of North Pole. Passes through Kennedy and Robeson Channels and reaches lat 82° 11′ N. the farthest north.
1872	Payer and Weyprecht (*Austrian*).....	Discover Franz Josef Land.

Year	Explorer and Nationality	Discovery or Exploration
1873	Warburton (*English*)	Crosses Western Australia from East to West.
1876	De Breeze (*French*)..	Explorations in the Ogowé and Gabun regions, Africa.
1876	H. M. Stanley (*Welsh*).....	Discovers Albert Edward Nyanza and establishes the fact that the waters west of the Lake Tanganyika are tributary to the Kongo.
1876	Sir Geo. Nares & A. H. Markham (*Eng.*)	Grant Land. Penetrated as far N. as 83° 20′ lat.
1878–1879	Nordenskjold (*Swed.*)	North-East Passage.
1878–1885	Major Serpa Pinto (*Port.*)	Twice crosses Africa.
1878–1892	Emin Pasha (*Ger.*) ..	Travels and surveys in Equatorial Africa. Discovery of Semliki River, &c.
1879	Moustier and Zweifel (*Swiss*).....	Sources of the Niger.
1881	George W. DeLong (*U. S.*).....	Sails from San Francisco July 8, 1879, drifts northwest until he reaches lat. 77° 15′.
1881–1884	A. W. Greely (*U. S.*).	Grinnell Land and NE. coast of Greenland. Expedition reaches 83° 24½′ N. 1882.
1885	Wiesmann (*German*)	Across Africa from West coast, Kongo Basin.
1880–1885	Wilhelm Junker (*Russ.-Ger.*)	Welle-Mobangi, and the Nyam-Nyam country.
1886	Robert E. Peary (*U. S.*).....	Makes his first journey to North Greenland.
1887	Capt. Younghusband (*English*).....	Travels from Pekin to Kashmir.
1891	Robert E. Peary (*U. S.*).....	Traverses the inland ice of Greenland and proves the convergence of the eastern and western coasts of the north part.
1897	Jackson (*Scot.*)....	Surveys and explorations in Franz Josef Land.
1893–1897	Sven Hedin (*Swed.*)	Explorations in North Central Asia and Tibet.
1893–1895	Fridtzof Nansen (*Norwegian*).....	Reaches with sledges lat. 86° 14′ N.—the farthest north.
1896	Donaldson Smith (*Scot.*)	Explores region of Lake Rudolf.
1896–1898	Capt. Marchand.....	Travels from Upper Mobangi to Fashoda.
1897	Andrée (*Swed.*).....	Attempt to cross over the North Pole in a balloon, with fatal results.
1897	D. Carnegie.....	Crosses Western Australia from South to North.
1898–1899	De Gerlache (*Belg'n*)	"Belgica" first ship to winter within Antarctic circle.
1899	Major Gibbons.....	Explorations in Kongo and Zambezi headwaters.
1900	Borchgrevink (*Eng.*)	Reaches lat. 78° 50′ S. *via* Victoria Land.
1900	Duke of Abruzzi (*Italian*).....	Reaches lat 86° 33′ N. *via* Franz Josef Land.
1902	Robert E. Peary	Reaches lat. 84° 17′ N. and traces the northern limit of the Greenland archipelago.
1902	Robert F. Scott (*Eng.*)	Reaches lat. 82° 77′ S.
1903	Anthony Fiala	Lat. 82° 4′ N. reached.
1906	Robert E. Peary (*U. S.*).....	Reaches lat. 87° 6′ N. on April 21. Traces north coast of Grant Land and discovers new land at about long. 100° W.
1906	Raold Amundson (*Norse*).....	Achieves Northwest Passage on vessel Gjoa.
1907	Dr. Mylius Erichsen.	Maps the northeast coast of Greenland completing the outline.
1907	Capt. Arnaud.....	Crosses Sahara from Algeria south to Gulf of Guinea.
1908	Capt. J. E. Bernier (*English*).....	Researches in archipelago north of America, taking possession of many provinces in the name of Canada.
1908	Dr. Sven Hedin (*Swed.*).....	Explores western Tibet from north to south, establishing the fact that it is transversed with parallel ranges extending east and west; discovery and exploration of main branches of Indus.
1908	Dutch.....	Explore part of Dutch Guinea.
1909	Robert E. Peary (*U. S.*).....	North Pole reached by Peary, Henson and four Eskimos on April 6.
1909	Sir Ernest H. Shackleton (*Eng.*).....	Reaches lat. 88° 23′ S.; ascends Mt. Erebus; organizes a party which determines the location of the South Magnetic Pole.
1909–1910	Dr. Wilhelm Sievers.	Discovers that the ultimate source of the Marañon Amazon is to be found on the snow mountain San Lorenzo.
1910	French.....	Investigation of the southwestern part of the Sahara.
1910	Dr. Karl Kumm.....	Crosses Africa from Niger to Nile determining the water parting between the Nile Kongo and the Shari River.
1911	Maj. P. H. Fawcett (*Eng.*).....	Follows Heath River (Bolivia) for 300 miles on foot mapping out surrounding topography.
1911	Captain Strümpel...	Surveys last unknown stretch of the Benué River, largest tributary of the Niger.
1911	Captain Raold Amundsen (*Norse*).....	Discovers the South Pole on Dec. 14.
1912	Robert F. Scott ..... (*Eng.*).....	Reaches the South Pole on January 18.
1912	Vilhjalmar Stephanson	Reports the discovery of a race of "blond Eskimos in the Coronation Gulf region of Victoria Land, British Columbia. This race is believed to be descended from a tribe of Norsemen inhabiting Greenland about the year 1000.
1912	Herschel C. Parker (*U.S.*)	Scales Mount McKinley to within 300 feet of top. Makes complete series of maps of surrounding country.
1913	Captain I. P. Koch.. (*Danish*).....	Traverses the inland ice of Greenland at about its widest part, from Cape Bismarck, where he landed on July 21, 1912 to the west coast, near Upernavik, which he reached on July 12, 1913.
1913	Hudson Stuck.....	Reached the top of Mount McKinley on June 21.

Uncle Sam's Work Shop

OR THE

Machinery of Our Federal Government

With

BRIEF BIOGRAPHICAL SKETCHES OF OUR PRESIDENTS FROM WASHINGTON TO WILSON

CONTENTS

Agriculture, Department of 14-16
Civil Service Commission and Machinery 20
Commerce and Labor, Department of 16-18
Judicial Branch of the Government 19-20
Justice, Department of 9-10
Legislative Branch of the Government 18-19
Library of Congress 20-22
Navy, Department of the 12-14
Post Office Department 10-12
Presidents of the United States 23-36
State, Department of 4
Treasury, Department of the 4
Vice-Presidents of the United States 4
War, Department of 7-9

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MACHINERY OF THE FEDERAL GOVERNMENT

EXECUTIVE LEGISLATIVE AND JUDICIAL DEPARTMENTS

THE PRESIDENT OF THE UNITED STATES.

Qualifications.—The President must be thirty-five years old, a native of the United States, and a resident therein for fourteen years. The qualifications of the Vice-President are the same.

Term.—His term of office is four years, and he swears to preserve, protect and defend the Constitution of the United States to the best of his ability.

Army Status.—He is Commander-in-Chief of the Army and Navy of the United States, when it is called into the actual service of the nation.

Advisors.—He may require the opinion in writing of the principal officers in each of the executive departments upon any subject relating to the duties of their respective offices. These executive departments are nine in number—Department of State, Treasury Department, War Department, Department of Justice (Attorney-General), Post Office Department, Navy Department, Department of the Interior, Department of Agriculture, and Department of Commerce and Labor. The heads thereof constitute the President's Cabinet or official family.

Powers.—He has power to grant pardons for offenses against the United States, except in cases of impeachments; to make treaties by and with the advice and consent of two-thirds of the Senate; nominate, and, by and with the advice and consent of the Senate, appoint ambassadors, ministers and consuls to foreign countries, Judges of the U. S. Supreme Court, and all other officers of the United States whose appointments are not otherwise provided for. If vacancies occur during a recess of the Senate, he may grant commissions to new appointees, which shall expire at the end of the next session of the Senate.

Duties.—He must give to Congress, from time to time, information of the state of the Union, and advise such legislation as to him shall appear proper and expedient. He may call either house of Congress or both into special session on extraordinary occasions or in a national emergency. If the houses disagree as to a time of adjournment, he may adjourn them.

Signing Bills.—He shall sign all bills passed by Congress before they can become laws; and if he cannot approve a bill he may return it to the House in which it originated with his objections. This is called his veto. But if he fails to sign a bill passed by both Houses, or to return it to Congress within ten days after its passage, it becomes a law without his approval.

Time of Election.—The President and Vice-President of the United States are chosen by officials called "Electors" in each State, who are, under existing State laws, chosen by the qualified voters thereof by ballot, on the first Tuesday after the first Monday of November in every fourth year preceding the year in which the presidential term expires. What are called presidential years are even years—1900, 1904, 1908, etc.

Manner of Election.—The Constitution of the United States prescribes that each State shall "appoint," in such manner as the Legislature thereof may direct, a number of electors equal to the whole number of Senators and Representatives to which the State may be entitled in Congress; but no Senator or Representative or person holding an office of trust or profit under the United States shall be an elector. The Constitution requires that the day when electors are chosen shall be the same throughout the United States. At the beginning of our Government most of the electors were chosen by the Legislatures of their respective States, the people having no direct participation in their choice; and one State, South Carolina, continued that practice down to the breaking out of the Civil War. But in all the States now the electors are, under the direction of State laws, chosen by the people on a general State ticket.

Meeting of Electors.—The manner in which the chosen electors meet and ballot for a President and Vice-President of the United States is provided for in Article XII of the Constitution, and is as follows:

The electors shall meet in their respective States, and vote by ballot for President and Vice-President, one of whom, at least, shall not be an inhabitant of the same State with themselves; they shall name in their ballots the person voted for as President, and in distinct ballots the person voted for as Vice-President; and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice-President, and of the number of votes for each, which lists they shall sign and certify, and transmit, sealed, to the seat of government of the United States, directed to the President of the Senate.

Counting the Ballots.—The same article then prescribes the mode in which the Congress shall count the ballots of the electors, and announce the result thereof, which is as follows:

The President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates, and the votes shall then be counted; the person having the greatest number of votes for President shall be President, if such number be a majority of the whole number of electors appointed; and if no person have such majority, then from the persons having the highest number not exceeding three on the list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President. But in choosing the President the votes shall be taken by States, the representation from each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the States, and a majority from all the States shall be necessary to a choice. And if the House of Representatives shall not choose a President, whenever the right of choice shall devolve upon them, before the fourth day of March next following, then the Vice-President shall act as President, as in the case of the death or other constitutional disability of the President. The person having the greatest number of votes as Vice-President shall be the Vice-President if such number be a majority of the whole number of electors appointed; and if no person have a majority, then from the two highest numbers on the list the Senate shall choose the Vice-President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators, and a majority of the whole number shall be necessary to a choice.

Cases of Dispute.—The procedure of the two houses, in case the returns of the election of electors from any State are disputed, is provided in the "Electoral Count" act, passed by the Forty-ninth Congress. The act directs that the Presidential electors shall meet and give their votes on the second Monday in January next following their election. It fixes the time when Congress shall be in session to count the ballots as the second Wednesday in February succeeding the meeting of the electors.

Presidential Succession.—The Presidential succession is fixed by Chapter IV of the acts of the Forty-ninth Congress, first session. In case of the removal, death, resignation, or inability of both the President and Vice-President, then the Secretary of State shall act as President until the disability of the President or Vice-President is removed or a President is elected. If there be no Secretary of State, then the Secretary of the Treasury will act; and the remainder of the order of succession is: Secretary of War, Attorney-General, Postmaster-General, Secretary of the Navy, and Secretary of the Interior (the office of Secretary of Agriculture was created after the passage of the act). The acting President must,

upon taking office, convene Congress, if not at the time in session, in extraordinary session, giving twenty days' notice. This act applies only to such Cabinet officers as shall have been appointed by the advice and consent of the Senate and are eligible under the Constitution to the Presidency.

Salary.—The salary of the President of the United States is $75,000 per year, with a customary addition of $25,000 for traveling expenses. His official and private residence is the "White House," Washington, D. C.

VICE-PRESIDENT OF THE UNITED STATES.

Qualifications.—The qualifications for office of the Vice-President are the same as those of the President. They are elected at the same time and by the same process. Their terms of office expire on the same days.

Succession.—If the President dies, or becomes unable to perform the duties of his office, or resigns, or is removed from it, the Vice-President succeeds to the office for the unexpired term. In case both should die, or be removed, or unable to perform the duties of the office, then the succession goes as provided for by the Act of Congress quoted in the preceding article on the President.

Powers.—The Vice-President is by virtue of his office the President of the Senate, and the Senate may elect a presiding officer, who shall be its President in case of the death, resignation, inability, or removal of the Vice-President. The Vice-President may be removed from office on impeachment for and conviction of treason, bribery, or other high crime and misdemeanor.

Voting Power.—As presiding officer of the Senate, he cannot vote except when the Senate is a tie on any question; then he may cast the deciding vote.

Other Duties.—As presiding officer of the Senate he opens, in the presence of the assembled members of the House and Senate, the certificates of the election of the President and Vice-President of the United States, and oversees the counting of the votes attending the certificates.

Salary.—The salary of the Vice-President is $12,000 per year.

DEPARTMENT OF STATE.

Secretary of State.—The Secretary of State is charged, under the direction of the President, with the duties appertaining to correspondence with the public ministers and the consuls of the United States, and with the representatives of foreign powers accredited to the United States; and the negotiations of whatever character relating to the foreign affairs of the United States. He is also the medium of correspondence between the President and the chief executives of the several States of the United States; he has the custody of the Great Seal of the United States, and countersigns and affixes such seal to all executive proclamations, to various commissions, and to warrants for the extradition of fugitives from justice. He is regarded as the first in rank among the members of the Cabinet. He is also the custodian of the treaties made with foreign States, and of the laws of the United States. He grants and issues passports, and exequaturs to foreign consuls in the United States are issued through his office. He publishes the laws and resolutions of Congress, amendments to the Constitution, and proclamations declaring the admission of new States into the Union. Salary, $12,000.

Assistant Secretaries of State.—The Assistant Secretary of State becomes the Acting Secretary of State in the absence of the Secretary. Under the organization of the department the Assistant Secretary, Second Assistant Secretary, and Third Assistant Secretary are charged with the immediate supervision of all correspondence with the diplomatic and consular officers, and are entrusted with the preparation of the correspondence upon any questions arising in the course of the public business that may be assigned to them by the Secretary.

Chief Clerk.—The Chief Clerk has the direction of the consular service and general supervision of the clerks and employees and of the business of the department.

Diplomatic Bureau.—Diplomatic correspondence and miscellaneous correspondence relating thereto.

Consular Bureau.—Consular correspondence and miscellaneous correspondence relating thereto.

Bureau of Indexes and Archives.—Opening, indexing, and registering all correspondence to and from the department; the preservation of the archives.

Bureau of Accounts.—Custody and disbursement of appropriations under direction of the department; charged with custody of indemnity funds and supply bonds; care of the property of the department.

Bureau of Rolls and Library.—Custody of the rolls, treaties, etc.; promulgation of the laws, treaties, executive orders and proclamations; care and superintendence of the library and public documents; care of papers relating to international commissions.

Bureau of Appointments.—Matters relating to appointments, applications, and recommendations for office, etc.; the preparation of commissions, exequaturs, consular bonds, and warrants of extradition, the Department Register, and diplomatic and consular lists; custody of the Great Seal.

Bureau of Citizenship.—Examination of applications for passports, issuance of passports and authentications thereof, registration, etc., under act of March 2, 1907, in reference to expatriation of citizens and their protection abroad, keeping of necessary records thereunder, and correspondence relating thereto.

Bureau of Trade Relations.—Preparation of instructions to consular officers for reports to be printed by the Department of Commerce and Labor; revision and transmission of such reports to said department and to other branches of the government service, and compilation of commercial information for the use of the Department of State.

Division of Far Eastern Affairs.—Diplomatic and consular correspondence, on matters other than those of an administrative character, in relation to China, Japan, Korea, Siam, Straits Settlements, Borneo, East Indies, India, and in general the Far East.

Office of the Law Clerk.—Editing and indexing the laws, resolutions, public treaties, and proclamations for publication in the Statutes at Large.

Superintendent of Building.—The superintendent of the State, War, and Navy Department building is the executive officer of the commission created by Congress, consisting of the Secretaries of State, War, and Navy, for the government of this building. He has charge of, care, preservation, repairing, warming, ventilating, lighting, and cleaning of the building, grounds, and approaches, and disburses the special appropriations for this purpose; he has charge of all the employees of the building proper, and appoints them by direction of the Secretaries.

DEPARTMENT OF THE TREASURY.

Secretary of the Treasury.—The Secretary of the Treasury is charged by law with the management of the national finances. He prepares plans for the improvement of the revenue and for the support of the public credit; superintends the collection of the revenue and directs the forms of keeping and rendering public accounts and of making returns, grants warrants for all moneys drawn from the Treasury in pursuance of appropriations made by law, and for the payment of moneys into the Treasury; and annually submits to Congress estimates of the probable revenues and disbursements of the Government. He also controls the construction of public buildings; the coinage and printing of money; the administration of the Life Saving, Revenue Cutter, and the Public Health and Marine Hospital branches of the public service, and furnishes generally such information as may be required by either branch of Congress on all matters pertaining to the foregoing. Salary, $12,000.

Assistant Secretaries of the Treasury.—To one of the Assistant Secretaries is assigned the general direction and supervision of all matters pertaining to the customs service, and all matters relating to the public business assigned to the following divisions: The division of customs and the division of special agents.

To a second Assistant Secretary is assigned the general direction and supervision of all matters relating to the

public business and assigned to the following bureau, offices, and divisions: The Office of the Supervising Architect; the Office of the Chief Clerk and Superintendent; the Office of Internal Revenue; the Bureau of Public Health and Marine Hospital Service of the United States; the Office of the Life Saving Service; and the division of Revenue Cutter Service.

To a third Assistant Secretary is assigned the general direction and supervision of all matters relating to the public business assigned to the following bureau, office, and divisions: The Office of the Director of the Mint; the Bureau of Engraving and Printing; the Secret Service division; the division of public moneys; the division of loans and currency; the division of bookkeeping and warrants; the division of printing and stationery; and the division of mails and files.

Chief Clerk.—The Chief Clerk is the general executive officer of the department; and, under the immediate direction of the Secretary and the assistant secretaries, is charged with responsibility for the enforcement of departmental regulations general in their nature; superintends all buildings occupied by the department in the District of Columbia, and expenditures for the care of all public buildings under control of the Secretary of the Treasury; and has the custody of the records, files and library of the Secretary's office.

Supervising Architect.—The duties of the Supervising Architect are subject to the direction and approval of the Secretary of the Treasury. They embrace the following subjects-matter: The selection of sites for public buildings; securing necessary state cession of jurisdiction; the preparation of estimates, drawings, etc., for approval by the Cabinet Officers, as required by law, preliminary to the erection of court houses, custom houses, post offices, marine hospitals, etc.; securing under what is known as the "Tarsney Act" competitive designs, and completing all arrangements thereunder; arranging all details incident to the Government entering into contracts for construction, etc. He is also charged with the duty of maintaining and keeping in repair all buildings under the control of the Treasury Department not in the District of Columbia; maintaining and keeping in a proper state of efficiency and capacity all heating apparatus and hoisting systems in these buildings, including those in the District of Columbia; and control of the supply of vaults, safes, etc., for all public buildings.

Comptroller of the Treasury.—The Comptroller of the Treasury, under the direction of the Secretary of the Treasury, prescribes the forms of keeping and rendering all public accounts except those relating to postal revenues and the expenditures therefrom. He is charged with the duty of revising accounts upon appeal from settlements made by the auditors. Upon the application of disbursing officers, the head of any executive department, or other independent establishment not under any of the executive departments, the comptroller is required to render his advance decision upon any question involving a payment to be made by them or under them, which decision, when rendered, governs the auditor and the comptroller in the settlement of the account involving the payment inquired about. He is required to approve, disapprove, or modify all decisions by auditors making an original construction or modifying an existing construction of statutes, and certify his action to the auditor whose duties are affected thereby. Under his direction the several auditors superintend the recovery of all debts finally certified by them, respectively, to be due the United States, except those arising under the Post Office Department. He superintends the preservation by the auditors of all accounts which have been finally adjusted by them, together with the vouchers and certificates relating to the same. He is required, on his own motion, when in the interests of the Government, to revise any account settled by any auditor. In any case where, in his opinion, the interests of the Government require, he may direct any of the auditors forthwith to audit and settle any particular account pending before the said auditor for settlement. It is his duty to countersign all warrants authorized by law to be signed by the Secretary of the Treasury.

Auditor for the Treasury Department.—The Auditor for the Treasury Department receives and examines all accounts of salaries and incidental expenses of the office of the Secretary of the Treasury and all bureaus and offices under his direction. All accounts relating to the customs service, the public debt, internal revenue, Treasurer and assistant treasurers, mints and assay offices, Bureaus of Engraving and Printing, Revenue Cutter Service, Life Saving Service, Public Health and Marine Hospital Service, Public Buildings, Secret Service, and all other business within the jurisdiction of the Department of the Treasury, and certifies the balances arising thereon.

Auditor for the War Department.—The Auditor for the War Department audits and settles all accounts of salaries and incidental expenses of the office of the Secretary of War, and of all bureaus and offices under his direction; all accounts relating to the military establishment, armories, and arsenals, national cemeteries, fortifications, public buildings and grounds under the Chief of Engineers, rivers and harbors, the Military Academy, the Isthmian Canal Commission, and to all other business within the jurisdiction of the Department of War.

Auditor for the Interior Department.—The Auditor for the Interior Department audits and settles all accounts of salaries and incidental expenses of the office of the Secretary of the Interior, and of all bureaus and offices under his direction; all accounts relating to the protection, survey, and sale of public lands and the reclamation of arid public lands, the Geological Survey, army and navy pensions, Indian affairs, Howard University, the Government Hospital for the Insane, the Columbian Institution for the Deaf and Dumb, the Patent Office, the Capitol and grounds, the Hot Springs Reservation, the reimbursement from accrued pensions of the expenses of the last sickness and burial of pensioners under the act of March 2, 1895, and all other business within the jurisdiction of the Department of the Interior.

Auditor for the Navy Department.—The Auditor for the Navy Department examines and settles all accounts of the Navy Department, including the Office of the Secretary of the Navy, and all offices and bureaus under his direction, certifying the balances arising thereon to the Secretary of the Treasury and sending a copy of each certificate to the Secretary of the Navy.

Auditor for the State and Other Departments.—The Auditor for the State and other Departments receives, examines, and certifies the balances arising thereon to the division of bookkeeping and warrants all accounts of salaries and incidental expenses of the Offices of the Secretary of State, the Attorney-General, the Secretary of Agriculture, and the Secretary of Commerce and Labor, and of all bureaus and offices under their direction; all accounts relating to all other business within the jurisdiction of the Departments of State, Justice, Agriculture, and Commerce and Labor; all accounts relating to the Diplomatic and Consular Service, the judiciary, United States courts, judgments of the United States courts, and Courts of Claims relating to accounts settled in his office, Executive Office, Civil Service Commission, Interstate Commerce Commission, District of Columbia, Court of Claims, Smithsonian Institution, Territorial governments, the Senate, the House of Representatives, the Public Printer, Library of Congress, Botanic Garden, and accounts of all boards, commissions, and establishments of the Government not within the jurisdiction of any of the Executive Departments.

Auditor for the Post Office Department.—The Auditor for the Post Office Department audits and settles all accounts for salaries and incidental expenses of the Office of the Postmaster-General and of all bureaus and offices under his direction; all postal and money order accounts of postmasters, all accounts relating to the transportation of mails, and to all other business within the jurisdiction of the Post Office Department and certifies the balances arising thereon to the Postmaster-General for accounts of the postal revenue and expenditures therefrom, and to the Secretary of the Treasury for other accounts. He countersigns and registers the warrants upon the Treasury issued in liquidation of indebtedness; superintends the collecting of debts due the United States for the service of the Post Office

Department and all penalties imposed; directs suits and all legal proceedings in civil actions, and takes all legal measures to enforce the payment of money due the United States for the service of the Post Office Department, and for this purpose has direct official relations with the Solicitor of the Treasury Department of Justice. He receives and accepts, with the written consent of the Postmaster-General, offers of compromise under Sections 295 and 405, Revised Statutes.

Treasurer of the United States.—The Treasurer of the United States is charged with the receipt and disbursement of all public moneys that may be deposited in the Treasury at Washington and in the sub-treasuries at Boston, New York, Philadelphia, Baltimore, Cincinnati, Chicago, St. Louis, New Orleans, and San Francisco and in the national bank United States depositories; is redemption agent for national bank notes; is trustee for bonds held to secure national bank circulation and public deposits in national banks; is custodian of miscellaneous trust funds; is fiscal agent for paying interest on the public debt and for paying the land purchase bonds of the Philippine Islands, principal and interest; is special disbursing officer for the Indian school fund and for the Philippine Islands tariff fund; is agent for paying interest on Spanish indemnity certificates; and is ex-officio commissioner of the sinking fund of the District of Columbia.

An Assistant Treasurer and Deputy Assistant Treasurer of the United States is authorized by the Treasurer, with the consent of the Secretary of the Treasury, to act in the place and discharge any or all of the duties of the Treasurer of the United States.

Register of the Treasury.—The Register of the Treasury signs and issues all bonds of the United States, the Panama Canal loan, the sundry loans of the Philippine Islands, the city of Manila sewer and water loan, and the District of Columbia Loan; and transmits to the Treasurer of the United States schedules showing the name of every individual, corporation, etc., holding registered bonds and entitled to receive interest thereon. He receives, examines and registers coupon bonds exchanged for registered bonds or redeemed, and registered bonds transferred and finally redeemed. He receives, examines, arranges, and registers the upper halves of all redeemed United States notes, gold certificates, silver certificates, and Treasury notes; detached interest coupons, interest checks on registered bonds, redeemed fractional currency notes, and all other United States securities redeemed and destroyed; also all customs, internal revenue, and postage stamps condemned for imperfections and destroyed. He is represented on the committee having in charge the destruction by maceration of certain of the United States securities, etc., mentioned above.

Comptroller of the Currency.—The Comptroller of the Currency has, under the direction of the Secretary of the Treasury, the supervision of the national banks; the organization of national banks; the preparation and issue of national bank circulation; the examination and consolidation of the reports of national banks, and the redemption and destruction of notes issued by national banks.

Director of the Mint.—The Director of the Mint has general supervision of all the mints and assay offices of the United States. He prescribes rules, to be approved by the Secretary of the Treasury, for the transaction of business at the mints and assay offices, receives daily reports of their operations; directs the coinage to be executed; reviews the accounts, authorizes all expenditures; superintends the annual settlements of the several institutions; and makes special examinations of them when deemed necessary. All appointments, removals, and transfers in the mints and assay offices are subject to his approval.

Tests of the weight and fineness of coins struck at the mints are made in the assay laboratory under his charge. He publishes quarterly an estimate of the value of the standard coins of foreign countries for custom house and other public purposes. Two annual reports are prepared by the Director, one giving the operations of the mint service for the fiscal year, printed in the Finance Report of the Secretary of the Treasury, the other giving statistics of the production of the precious metals for the calendar year.

Commissioner of Internal Revenue.—The Commissioner has general superintendence of the collection of all internal revenue taxes, the enforcement of internal revenue laws; employment of internal revenue agents; compensation and duties of gaugers, storekeepers, and other subordinate officers; the preparation and distribution of stamps, instructions, regulations, forms, blanks, hydrometers, stationery, etc.

Public Health and Marine Hospital Service.—The Surgeon-General of the Public Health and Marine Hospital Service is charged with the supervision of the marine hospitals and other relief stations of the service and the care of sick and disabled seamen taken from merchant vessels of the United States (ocean, lake and river) and vessels of the Light House Service and officers and men of the Revenue Cutter Service, Coast and Geodetic Survey, and surfmen of the Life Saving Service. This supervision includes the purveying of medical and other supplies, the assignment of orders to medical officers, the examination of requisitions, vouchers, and property returns, and all matters pertaining to the service.

Under his direction all applicants for pilots' licenses are examined for the detection of color-blindness. Ordinary seamen on request of the master or agent are examined physically to determine their fitness before shipment, and a like examination is made of the candidates for admission to the Revenue Cutter Service and candidates for appointment as surfmen in the United States Life Saving Service. He examines also and passes upon the medical certificates of claimants for pensions under the laws governing the Life Saving Service.

He is charged with the framing of regulations for the prevention of the introduction and spread of contagious disease, and is also charged with the conduct of the quarantine service of the United States.

The Surgeon-General, in the interest of public health, is authorized to call conferences at least once a year of the State and territorial boards of health, quarantine authorities, and State health officers (the District of Columbia included) for the purpose of considering matters relating to the public health.

Under the law he is charged with the direction of the hygienic laboratory for the investigation of contagious and infectious disease and other matters relating to the public health; with the publication of the weekly Public Health Reports of the United States, including the collection and publication of vital statistics, and is responsible for the proper enforcement of the "Act to regulate the sale of viruses, serums, toxins, and analogous products in the District of Columbia, to regulate interstate traffic in said articles, and for other purposes," approved July 1, 1902.

Under the interstate quarantine law, he is charged with preparing the rules and regulations, under direction of the Secretary of the Treasury, necessary to prevent the introduction of certain contagious diseases from one State to another, and he has also supervision of the medical inspection of alien immigrants.

He is charged with the control of an experiment station for the study of the prevention and cure of leprosy, now in course of establishment on the island of Molokai, Hawaii, under direction of the Secretary of the Treasury.

Revenue Cutter Service.—The Captain Commandant of the Revenue Cutter Service is Chief of the Division of Revenue Cutter Service and has charge, under the direction of the Secretary of the Treasury, of the organization and government of the Revenue Cutter Service.

Bureau of Engraving and Printing.—The Bureau of Engraving and Printing designs, engraves, prints, and finishes all of the securities and other similar work of the Government printed from steel plates, embracing United States notes, bonds, and certificates, national bank notes, internal revenue, postage and customs stamps, Treasury drafts and checks, disbursing officers' checks, licenses, commissions, patent and pension certificates, and portraits authorized by law of deceased members of Congress and other public officers.

General Superintendent of the Life Saving Serv-

ice.—It is the duty of the General Superintendent to supervise the organization and government of the employees of the service; to prepare and revise regulations therefor as may be necessary; to supervise the expenditure of all appropriations made for the support and maintenance of the Life Saving Service; to examine the accounts of disbursements of the district superintendents, and to certify the same to the accounting officers of the Treasury Department; to examine the property returns of the keepers of the several stations, and see that all public property thereto belonging is properly accounted for; to acquaint himself, as far as practicable, with all means employed in foreign countries which may seem to advantageously affect the interest of the service, and to cause to be properly investigated all plans, devices, and inventions for the improvement of life saving apparatus for use at the stations which may appear to be meritorious and available; to exercise supervision over the selection of sites for new stations, the establishment of which may be authorized by law, or for old ones, the removal of which may be made necessary by the encroachment of the sea or by other causes; to prepare and submit to the Secretary of the Treasury estimates for the support of the service; to collect and compile the statistics of marine disasters, as contemplated by the act of June 20, 1874; and to submit to the Secretary of the Treasury, for transmission to Congress, an annual report of the expenditures of the moneys appropriated for the maintenance of the Life Saving Service and of the operations of said service during the year.

DEPARTMENT OF WAR.

Secretary of War.—The Secretary of War is head of the War Department, and performs such duties as are required of him by law or may be enjoined upon him by the President concerning the military service.

He is charged by law with the supervision of all estimates of appropriations for the expenses of the department, including the military establishment; of all purchases of Army supplies; of all expenditures for the support, transportation, and maintenance of the Army; and of such expenditures of a civil nature as may be placed by Congress under his direction.

He also has supervision of the United States Military Academy at West Point and of military education in the Army, of the Board of Ordnance and Fortification, of the various battlefield commissions, and of the publication of the Official Records of the War of the Rebellion.

He has charge of all matters relating to national defense and seacoast fortifications, army ordnance, river and harbor improvements, the prevention of obstruction to navigation, and the establishment of harbor lines; and all plans and locations of bridges authorized by Congress to be constructed over the navigable waters of the United States require his approval. He also has charge of the establishment or abandonment of military posts, and all matters relating to leases, revocable licenses, and all other privileges upon lands under the control of the War Department. Salary, $12,000.

Assistant Secretary of War.—To the Assistant Secretary of War is assigned the general direction and supervision of all matters relating to rivers and harbors; bridges over navigable waters of the United States; leases, revocable licenses, and all other privileges upon lands under the control of the War Department; inspections relating to the military establishment; recruiting service, discharges, commutation of rations, courts-martial, and other questions relating to enlisted men, including clemency cases and matters relating to prisoners at military prisons and penitentiaries.

He has also charge of all matters relating to the militia; the supervision of miscellaneous claims and accounts; matters relating to national cemeteries, boards of survey, open-market purchases, and medals of honor.

The assistant Secretary of War is also vested with authority to decide all cases which do not involve questions of policy, the establishment or reversal of precedents, or matters of special or extraordinary importance.

Assistant and Chief Clerk.—Under the immediate direction of the Secretary, the Assistant and Chief Clerk has the custody of the records and files, and is charged with supervision of the receipt, distribution, and transmission of the official mail and the correspondence of the Secretary's Office; of all matters affecting the civil force of the War Department, and the departments at large; War Department printing and binding, and official advertising and job printing for the Army and the War Department; War Department supplies; routine calls for information from the records; expenditures from appropriations for contingent expenses and stationery for the War Department, and matters of routine character not requiring the personal action of the Secretary or the Assistant Secretary of War.

General Staff.—The General Staff Corps was organized under the provisions of act of Congress approved February 14, 1903. Its principal duties are to prepare plans for the national defense and for the mobilization of the military forces in time of war; to investigate and report upon all questions affecting the efficiency of the Army and its state of preparation for military operations; to render professional aid and assistance to the Secretary of War and to general officers and other superior commanders, and to act as their agents in informing and co-ordinating the action of all the different officers who are subject to the supervision of the Chief of Staff, and to perform such other military duties not otherwise assigned by law as may be from time to time prescribed by the President.

The Chief of Staff, under direction of the President, or of the Secretary of War under the direction of the President, has supervision of all troops of the line, of the Adjutant-General's department in matters pertaining to the command, discipline, or administration of the existing military establishment, and of the Inspector-General's, Judge Advocate General's, Quartermaster's, Subsistence, Medical, Pay, and Ordnance Departments, the Corps of Engineers and the Signal Corps, and performs such other military duties not otherwise assigned by law as may be assigned to him by the President. For purposes of administration the office of the Chief of Staff constitutes a supervising military bureau of the War Department. Duties formerly prescribed by statute for the Commanding General of the Army as a member of the Board of Ordnance and Fortification and of the Board of Commissioners of the Soldiers' Home are performed by the Chief of Staff or some other officer designated by the President.

Military Bureaus.—The chiefs of the military bureaus of the War Department are officers of the Regular Army of the United States and a part of the military establishment, viz.:

The Adjutant-General is charged with the duty of recording, authenticating, and communicating to troops and individuals in the military service all orders, instructions, and regulations issued by the Secretary of War through the Chief of Staff; of preparing and distributing commissions; of compiling and issuing the Army Register and the Army List and Directory; of consolidating the general returns of the Army; of arranging and preserving the reports of officers detailed to visit encampments of militia; of preparing the annual returns of the militia required by law to be submitted to Congress; of managing the recruiting service; and of recording and issuing orders from the War Department remitting or mitigating sentences of general prisoners who have been discharged from the military service. The Adjutant-General is vested by law with the charge, under the Secretary of War, "of the military and hospital records of the volunteer armies and the pension and other business of the War Department connected therewith"; and of the publication and distribution of the Official Records of the War of the Rebellion. He also has charge of the historical records and business of the permanent military establishment, including all pension, pay bounty, and other business pertaining to or based upon the military or medical histories of former officers or enlisted men. The archives of the Adjutant-General's office include all military records of the Revolutionary War; the records of all organizations, officers, and enlisted men that have

been in the military service of the United States since the Revolutionary War; the records of the movements and operations of troops; the medical and hospital records of the Army; all reports of physical examination of recruits and all identification cards; the records of the Provost-Marshal-General's bureau; the records of the Bureau of Refugees, Freedmen, and Abandoned Lands; the Confederate records, including those pertaining to the legislative, executive and judicial branches of the Confederate government.

The Inspector-General, with his assistants, inspects all military commands and stations, the schools of application, the military department of all colleges and schools at which officers of the Army are detailed, all depots, rendezvous, armories, arsenals, fortifications, and public works of every kind under charge of or carried on by officers of the Army, and also the money accounts of all disbursing officers of the Army.

The Quartermaster-General, aided by assistants, provides transportation for the Army; also clothing and equipage, horses, mules, and wagons, vessels, forage, stationery, and other miscellaneous quartermaster stores and property for the Army, and of clothing and equipage for the militia; constructs necessary buildings, wharves, roads, and bridges at military posts, and repairs the same; furnishes water, heating, and lighting apparatus; pays guides, spies, and interpreters; and is in charge of national cemeteries.

The Commissary-General of Subsistence has administrative control of the Subsistence Department; the disbursement of its appropriations; the providing of rations and their issue to the Army; the purchase and distribution of articles authorized to be kept for sale to officers and enlisted men; the administrative examination of accounts of subsistence funds preliminary to their settlement by the proper accounting officers of the Treasury; and the examination and settlement of returns of subsistence supplies.

The Surgeon-General has administrative control of the Medical Department; the disbursement of its appropriations; the designation of the stations of medical officers, and the issuing of all orders and instructions relating to their professional duties; the recruitment, instruction, and control of the Hospital Corps and of the Army Nurse Corps. He directs as to the selection, purchase, and distribution of the medical supplies of the Army. The Army Medical Museum, the library of the Surgeon-General's Office, and the general hospitals are under his direct control.

The Paymaster-General is charged with the payment of the officers and enlisted men of the Army and civil employees of the department; with furnishing funds to his officers and seeing that they duly account for the same, and with a preliminary examination of their accounts; also with the payment of allotments made by enlisted men of the Army for the benefit of their families.

The Chief of Engineers commands the Corps of Engineers, which is charged with all duties relating to construction and repair of fortifications, whether permanent or temporary, with all works of defense, with all military roads and bridges, and with such surveys as may be required for these objects, or the movement of armies in the field. It is also charged with the river and harbor improvements, with military and geographical explorations and surveys, with the survey of the lakes, and with any other engineer work specially assigned to the corps by acts of Congress or orders of the Secretary of War.

The Chief of Ordnance commands the Ordnance Department, the duties of which consist in providing, preserving, distributing, and accounting for every description of artillery, small arms, and all the munitions of war which may be required for the fortresses of the country, the armies in the field, and for the whole body of the militia of the Union. In these duties are comprised that of determining the general principles of construction and of prescribing in detail the models and forms of all military weapons employed in war. They comprise also the duty of prescribing the regulations for the proof and inspection of all these weapons, for maintaining uniformity and economy in their fabrication, for insuring their good quality and for their preservation and distribution.

The Judge-Advocate-General is directed by law to "receive, review, and cause to be recorded the proceedings of all courts-martial, courts of inquiry, and military commissions." He also furnishes the Secretary of War information and advice relating to lands under control of the War Department, and reports and opinions upon legal questions arising under the laws, regulations, and customs pertaining to the Army, and upon questions arising under the civil law; reports upon applications for clemency in the cases of military prisoners; examines and prepares legal papers relating to the erection of bridges over navigable waters; drafts bonds, and examines those given to the United States by disbursing officers, colleges, and others; examines, revises, and drafts charges and specifications against officers and soldiers; and also drafts and examines deeds, contracts, licenses, leases and legal papers generally.

The Chief Signal Officer is charged with the supervision of all military signal duties, and of books, papers and devices connected therewith, including telegraph and telephone apparatus and the necessary meteorological instruments for use on target ranges and other military uses; the construction, repair, and operation of military telegraph lines and cables, and the duty of collecting and transmitting information for the Army by telegraph or otherwise, and all other duties usually pertaining to military signaling.

To the Chief of the Bureau of Insular Affairs, under the immediate direction of the Secretary of War, is assigned all matters pertaining to civil government in the island possessions of the United States subject to the jurisdiction of the War Department; the Philippine Islands being the only ones so subject at the present time. To the Chief of the Bureau of Insular Affairs is also assigned the transaction of all business in this country in relation to the temporary administration of the government of the Republic of Cuba, established, under the provisions of the Platt Amendment, on September 29, 1906, which is subject to the supervision of the Secretary of War, as well as making it a matter of official record. The Bureau is the repository of all the civil records of the Philippines and of the former government of occupation of Cuba (which terminated May 20, 1902), as well as the records of Porto Rico during the period (ending April 30, 1900) in which the War Department exercised jurisdiction over that island." It is required to furnish information relative to these subjects. It prepares, compiles and arranges for publication executive documents regarding the Philippines. It makes a comptroller's review of the expenditures and receipts of the Philippine government, and prepares final statements for presentation to Congress of all such accounts. It makes the purchases of supplies in the United States for the Philippine government and arranges their shipment to Manila; and a preliminary audit of all expenditures of Philippine funds in the United States is made in this Bureau before final accounting of same to the Philippine authorities. It has charge of appointments in the United States to the Philippine civil service, including arrangements for the transportation of employees and their families. It gathers statistics of insular imports and exports, shipping and immigration, and monthly summaries of the same are issued. The duties of the law officer of the Bureau consist in investigating such propositions of law as require consideration, and submitting verbal or written reports thereon.

Board of Engineers for Rivers and Harbors.—The Board of Engineers for Rivers and Harbors is a permanent body created by the river and harbor act of June 13, 1902. To it are referred for consideration and recommendation all reports upon examinations and surveys provided for by Congress, and all projects or changes in projects for works of river and harbor improvement upon which report is desired by the Chief of Engineers, U. S. Army. It is further the duty of the Board, upon request by the Committe on Commerce of the Senate, or by the Committee on Rivers and Harbors of the House of Representatives, in the same manner to examine and report through the Chief of Engineers

upon any examinations, surveys, or projects for the improvement of rivers and harbors. In its investigations the Board gives consideration to all engineering, commercial, navigation, and economic questions involved in determining the advisability of undertaking such improvements at the expense of the United States.

Division of Military Affairs.—The Division of Military Affairs is vested with the transaction of business pertaining to the organized and unorganized militia of the United States, its jurisdiction embracing all administrative duties involving the armament, equipment, discipline, training, education, and organization of the militia; the conduct of camps of instruction and participation in the field exercises and maneuvers of the Regular Army; the mobilization and relations of the militia to the Regular Army in time of peace; and all matters pertaining to the militia not herein generically enumerated which do not, under existing laws, regulations, orders, or practice, come within the jurisdiction of the General Staff or any other division or bureau of the War Department. It is the central office of record for all matters pertaining to the militia not in the military service of the United States.

DEPARTMENT OF JUSTICE.

Attorney-General.—The Attorney-General is the head of the Department of Justice and the chief law officer of the Government. He represents the United States in matters involving legal questions; he gives his advice and opinion, when they are required by the President or by the heads of the other Executive Departments, on questions of law arising in the administration of their respective Departments; he appears in the Supreme Court of the United States in cases of especial gravity and importance; he exercises a general superintendence and direction over United States attorneys and marshals in all judicial districts in the States and Territories; and he provides special counsel for the United States whenever required by any department of the Government. Salary, $12,000.

Solicitor-General.—The Solicitor-General assists the Attorney-General in the performance of his general duties, and by special provisions of law, in case of a vacancy in the office of Attorney-General, or of his absence or disability, exercises all those duties. Under the direction of the Attorney-General, he has general charge of the business of the Government in the Supreme Court of the United States, and is assisted in the conduct and argument of cases therein by the Assistant Attorneys-General. He also, with the approval of the Attorney-General, prepares opinions rendered to the President and the heads of the Executive Departments, and confers with and directs the law officers of the Government throughout the country in the performance of their duties. When the Attorney-General so directs, any case in which the United States is interested, in any court of the United States, may be conducted and argued by the Solicitor-General; and he may be sent by the Attorney-General to attend to the interests of the United States in any State court, or elsewhere.

Assistant to the Attorney-General.—The Assistant to the Attorney-General has special charge of all suits and other matters arising under the Federal anti-trust and interstate commerce laws, and performs such other duties as may be required of him by the Attorney-General.

Assistant Attorneys-General.—The several Assistant Attorneys-General assist the Attorney-General in the performance of his duties. They assist in the argument of cases in the Supreme Court and in the preparation of legal opinions.

Three Assistant Attorneys-General are located in the main Department building at 1435 K Street, and, in addition to their general duties, particular subjects are assigned to them by the Attorney-General for the transaction of business arising thereunder with United States attorneys, other departments, and private parties in interest.

The office of the Assistant Attorney-General, including a number of assistant attorneys and clerks charged with defending suits in the Court of Claims, is located at 8 Jackson Square.

The Assistant Attorneys-General, charged with the defense of Indian depredation claims, is located in the Bond Building, at the corner of Fourteenth Street and New York Avenue.

The Assistant Attorney-General, charged with the defense of suits before the Spanish Treaty Claims Commission, together with his force of assistant attorneys, interpreters and clerks, is located in the Offices of the Spanish Treaty Claims Commission, at 1415 H Street.

The Assistant Attorneys-General and the Solicitors for the several Executive Departments, under the provisions of sections 349-350, Revised Statutes, exercise their functions under the supervision and control of the Attorney-General. They are the Assistant Attorney-General for the Department of the Interior, the Solicitor for the Department of State, the Solicitor of the Treasury, the Solicitor of Internal Revenue, and the Solicitor of the Department of Commerce and Labor.

Assistant Attorney-General for the Interior Department.—This Assistant Attorney-General is the chief law officer of that Department. When requested he advises the Secretary and Assistant Secretaries upon questions of law arising in the administration of the department. All appeals from the General Land Office are sent to his office for consideration. Oral arguments are heard by him in the more important cases, or by brief; and decisions are prepared under his supervision for the signature of the Secretary or First Assistant Secretary, as the case may be. The Assistant Attorney-General is aided in this and his other work by a number of assistant attorneys.

Solicitor for the Department of State.—The Solicitor is the chief law officer of that department. He advises the Secretary and Assistant Secretaries upon questions of municipal and international law referred to him, passes upon claims of citizens of the United States against foreign governments, claims of subjects or citizens of foreign governments against the United States, and upon applications for the extradition of criminals. The Assistant Solicitor acts as Solicitor in the absence of the latter, and in the division of the work of the office has general charge of extradition and citizenship matters.

Solicitor of the Treasury.—The Solicitor of the Treasury is charged with the supervision of much of the litigation of the Government, and it is his duty to give necessary instructions to United States attorneys, marshals, and clerks of courts in matters and proceedings appertaining to the suits under his superintendence, and to require reports from such officers; to take cognizance of all frauds or attempted frauds upon the revenue (customs) and to exercise a general supervision over the measures for their prevention and detection and for the prosecution of persons charged with the commission thereof; to have charge of lands acquired by the United States in payment of debts (except internal revenue); to make recommendations on offers of compromise (except in post office cases and in internal revenue cases before judgment); to effect the release of property owned or held by the United States where it has been attached; to approve the bonds of United States assistant treasurers, collectors of internal revenue, and Department disbursing clerks, and to examine all contracts of, and official bonds filed in, the Treasury Department; to issue distress warrants against delinquent collectors and other officers receiving public money, and disbursing officers and their sureties; to examine titles to life saving station sites; and as the law officer of the Treasury Department to give legal advice to the Secretary and other officers of that Department on matters arising therein.

Solicitor of Internal Revenue.—A Solicitor of Internal Revenue was added to the Internal Revenue Office corps by the act of July 13, 1866 (14 Stat., 170), but by the act of June 22, 1870 (16 Stat., 162), organizing the Department of Justice, the Solicitor was formally transferred to that Department. He is the law officer and legal adviser of the Commissioner. The only duties of which mention is made by law are in connection with internal revenue compromise cases, section 3229, Revised Statutes.

Solicitor of the Department of Commerce and Labor.—The Solicitor is the chief law officer of that Department. His duties are to act as legal adviser for the Secretary of Commerce and Labor and the chiefs of the various bureaus of said Department; to prepare and examine all contracts and bonds entered into or required by the said Department; and to render such legal services in connection with matters arising in the administrative work of the Department of Commerce and Labor as may be required of him by the Attorney-General.

Chief Clerk.—The Chief Clerk, under the direction of the Attorney-General, has general supervision of the clerks and employees; the consideration of applications for leave of absence; the direction of the force of laborers, charwomen, and watchmen; superintends all buildings occupied by the Department in Washington, D. C.; has charge of the horses, wagons, and carriages employed; has supervision of the division of mails and files; the purchase and distribution of supplies for the Department and the United States courts; the expenditure of the appropriations for contingent expenses and rents; supervision of the library; the consideration of requisitions upon the Public Printer for printing and binding; and supervision of the preparation of the annual report and the estimates of the Department.

Disbursing Clerk.—The disbursing clerk disburses funds from more than forty appropriations under the direction of the Attorney-General, including the salaries of the justices of the Supreme Court of the United States, the judges of the other United States courts throughout the country, including the Territories; of the United States attorneys, marshals, and other court officials, and of the officials of the Department proper; the contingent expenses of the Department and other miscellaneous appropriations.

Appointment Clerk.—The appointment clerk has charge of all matters relating to applications, recommendations, and appointments, including certifications by the Civil Service Commission; conducts correspondence pertaining thereto; prepares nominations sent to the Senate; prepares commissions and appointments for the officers and employees of the Department in Washington, and for United States judges, attorneys, and marshals and other officers under the Department. He also compiles the Register of the Department of Justice and matters relating to that Department for the Official Register of the United States.

Attorney in Charge of Pardons.—The attorney in charge of pardons takes charge of all applications for executive clemency, except those in Army and Navy cases, these being referred to the Secretary of War and the Secretary of the Navy, respectively; of the briefing of the cases and the correspondence in the relation to them.

Examiner of Titles.—The examiner of titles prepares opinions upon the title to lands belonging to or sought to be acquired by the Government for public purposes and opinions upon all legal matters growing out of the same. He has charge of all proceedings to acquire land under eminent domain, and conducts all the correspondence relating to the above matters.

Division of Accounts.—The division of accounts examines accounts payable from judiciary appropriations, including accounts of United States marshals, attorneys, clerks, and commissioners; conducts the correspondence relating thereto; authorizes certain court expenses, supervises the advancing of funds to United States marshals; prepares certain data for the annual report, and compiles the estimates of appropriations.

Superintendent of Prisons and Prisoners.—The superintendent of prisons and prisoners has charge, under the direction of the Attorney-General, of all matters relating to United States prisons and prisoners, including the support of prisoners in United States penitentiaries, reform schools, and jails; the support of United States prisoners confined in penitentiaries and jails throughout the country, and the construction work in progress at United States penitentiaries.

Chief Examiner.—The chief examiner has general supervision of the examination of the offices and records of United States court officials throughout the United States, and directs the work of examiners and certain special agents.

POST OFFICE DEPARTMENT.

Postmaster-General.—The Postmaster-General has the direction and management of the Post Office Department. He appoints all officers and employees of the Department, except the four Assistant Postmasters-General and the purchasing agent, who are appointed by the President, by and with the advice and consent of the Senate; appoints all postmasters whose compensation does not exceed $1,000; makes postal treaties with foreign Governments, by and with the advice of the President; awards and executes contracts, and directs the management of the domestic and foreign mail service. Salary, $12,000.

Chief Clerk.—The Chief Clerk of the Post Office Department is charged with the general superintendence of the clerical force of the Department; the assignment of clerks to offices and divisions; the consideration of applications for leave of absence by clerks and Department employees; the supervision of the preparation of estimates for the departmental and postal service; the keeping of the journals and order books; the supervision of the advertising; the supervision of requisitions upon the Treasury and the expenditure of the appropriations for the departmental service; the furnishing of stationery supplies for the departmental service out of the appropriation for stationery, contingent expenses, Post Office Department; the preparation of contracts for the publication of the Official Guide, compilation of the matter therefor, and supervision of its publication and distribution; the furnishing of information for settlement of Government telegraph accounts; the miscellaneous business correspondence of the Postmaster-General's Office; the care of the department and other buildings rented in connection therewith, and of all the furniture and public property therein; also the direction of the force of laborers and charwomen, and general superintendence of the watchmen through the captain of the watch; and the performance of such other duties as may be required by the Postmaster-General.

Assistant Attorney-General for the Post Office Department.—The Assistant Attorney-General for the Post Office Department is the chief law officer of that Department. He is charged with the duty of giving opinions to the Postmaster-General and the heads of the several offices of the Department upon questions of law arising upon the construction of the Postal Laws and Regulations, or otherwise, in the course of business in the postal service; with the consideration and submission (with advice) to the Postmaster-General of all claims of postmasters for losses by fire, burglary, or other unavoidable casualty, and of all certifications by the Auditor for the Post Office Department of cases of proposed compromise of liabilities to the United States, and of the remission of fines, penalties, and forfeitures under the statutes; the keeping and preparation of all correspondence with the Department of Justice relating to prosecutions and suits affecting or arising out of the postal service; and with the consideration of applications for pardon for crimes committed against the postal laws, which may be referred to the Department; with the preparation and submission (with advice) to the Postmaster-General of all appeals to him from the heads of the offices of the Department depending upon questions of law; with the determining of questions as to the delivery of mail the ownership of which is in dispute; with the hearing and consideration of cases relating to lotteries and the misuse of the mails in furtherance of schemes to defraud the public; with the consideration of all questions relating to the mailability of alleged indecent, obscene, scurrilous, or defamatory matter; with the examining and, when necessary, drafting all contracts of the Department; and with such other like duties as may from time to time be required by the Postmaster-General.

Purchasing Agent.—The purchasing agent supervises the purchase of all supplies both for the Post Office Department proper and for all branches of the Postal Service. He reviews all requisitions and authorizations for supplies, and if proper honors the same. He passes upon the sufficiency and propriety of all specifications for proposals; prepares and issues the advertisements and forms for proposals necessary to the making of contracts; reviews the reports of the committees on awards and recommends to the Postmaster-General such action as in his judgment should be taken thereon.

Chief Inspector.—The Chief Inspector supervises the work of post office inspectors and of the division of post office inspectors. To him is charged the consideration and adjustment of accounts of inspectors for salary and expenses, the preparation and issue of all cases for investigation, all matters relating to depredations upon the mails and losses therein, the custody of money and property collected or received by inspectors, and the restoration thereof to the proper parties or owners. To his office are referred all complaints of losses or irregularities in the mails and all reported violations of the postal laws.

First Assistant Postmaster-General.—The First Assistant Postmaster-General has charge of the following divisions, to which are assigned the duties specified:

Postmasters' Appointments.—The preparation of cases for the appointment of postmasters, and for the establishment, discontinuance, and change of name of post offices, and change of site of fourth-class offices; the recording of appointments of postmasters, the supervision of their bonding, the obtaining, recording, and filing of their oaths, and the issuing of their commissions; the consideration of charges and complaints against postmasters; the granting of leaves of absence to postmasters; the regulation of hours of business at post offices, and the handling of certain miscellaneous correspondence relating to postmasters and post offices.

Salaries and Allowances.—The annual readjustment of Presidential postmasters' salaries; the preparation of cases for allowances for clerk hire, rent, light, fuel, canceling machines, and miscellaneous items; the supervision and recording of the appointment, bonding, removal, and salaries of assistant postmasters and other post office employees, except letter carriers; the fixing of the sites of Presidential post offices; the establishment of postal stations; the execution of leases, and the regulation of box rents and key deposits.

City Delivery.—The supervision of the establishment and extension of city delivery service; the preparation of cases for allowances for pay of letter carriers, and for horse hire, wagon-collection equipment, bicycles, and car fare; the supervision and recording of the appointment, bonding, removal, and salaries of carriers, and the control of schedules of deliveries and collections.

Second Assistant Postmaster-General. — The Second Assistant Postmaster-General is charged with the general supervision of matters pertaining to the transportation of the domestic and foreign mails, and his bureau comprises six divisions with duties as hereinafter indicated.

Railway Adjustments.—Has charge of the preparation of cases authorizing the transportation of mails by railroads, cable and electric roads, wagons and pneumatic tubes in cities, and by mail messengers; the establishment of railway postal-car service, and changes in existing service, prepares orders and instructions for the weighing of mails on railroads, receives the returns and computes basis of pay therefrom; prepares cases for the adjustment of allowances to railroads for carrying the mails, and for postal cars; authorizes expenditures and credits for the weighing of the mails, and transportation by freight or express of postal cards, stamped envelopes, and mail equipment, and attends to all correspondence relative to these matters.

Contracts.—Prepares all advertisements inviting proposals for star and steamboat service; receives proposals; prepares orders for the awarding of contracts; attends to the execution of contracts; prepares orders and cases for new service or changes in existing service; prepares schedules for the performance of service; prepares the daily report for the Auditor for the Post Office Department affecting accounts for mail transportation; prepares statistics and reports of mail service required by law, and handles all correspondence relating thereto.

Foreign Mails.—Is charged with the duty of arranging all details connected with the transportation of foreign mails (except those relative to the money-order system); supervises the preparation of postal conventions and the regulation for their execution, as well as the consideration of the questions arising under them, and prepares all correspondence relative thereto. Also has supervision of the ocean mail service, including the adjustment of accounts with steamship companies for the transportation of mails to foreign countries.

Railway Mail Service.—Is charged with the supervision of the railway mail service and railway postal clerks; prepares cases for the appointment, removal, promotion, and reduction of said clerks; conducts correspondence and issues orders relative to the moving of the mails on railroad trains; has charge of the dispatch and distribution of mail matter on railway postal cars and post offices; conducts the weighing of mails, and attends to all correspondence relative to these matters.

Inspection.—Is charged with the examination of reports as to the performance of mail service by contractors and carriers on the several classes of mail routes under the supervision of the Second Assistant Postmaster-General; prepares all cases and orders for deductions for non-performance of service and for the imposition of fines for delinquencies of contractors and carriers; for deductions from compensation to railroads on account of failures and late arrivals; authorization for the payment of railway postal clerks; the certification of service to the Auditor for the Post Office Department, and the preparation of correspondence relative to the non-performance of contract requirements for carrying the mails.

Equipment.—Is charged with the preparation of matters pertaining to the furnishing of mail bags, mail locks, and keys, label cases, and mail-bag cord fasteners; the issuing of such articles for the use of the service, repairing of the same, the keeping of records and accounts pertaining thereto, and the preparation of correspondence incident to these duties.

Third Assistant Postmaster-General.—The Third Assistant Postmaster-General has charge of the following divisions:

Finance.—The financial system, including the payment by warrant or draft of accounts chargeable against appropriations for the postal service; the designation of depositories for postal funds; the supervision and instruction of all postmasters relative to the disposition of the postal revenue from whatever source, and the receipt and disposition of all moneys coming directly to the Department.

Stamps.—The supervision of the manufacture of postage stamps, stamp books, stamped envelopes, newspaper wrappers, and postal cards by the various contractors, and of the issuance of this stamped paper to postmasters; the keeping of the accounts and records of these transactions; the supervision and collection of the postal revenue accruing through the sale of such stamped paper or otherwise.

Money Orders.—The supervision and management of the money-order service, both domestic and international; the preparation of conventions for the exchange of money orders with foreign countries.

Registered Mails.—The supervision and management of the registered mail service, the establishment and control of all through registry exchanges; the instruction of all postmasters in registry matters, and the consideration of all claims for limited indemnity for lost registered matter.

Classification.—The general control of all business relating to the classification of domestic mail matter and the rates of postage thereon, including the determination of the admissibility of publications to the second class of mail matter and their right to continue in that class, the general supervision of those therein, and the instruction of postmasters relative thereto; also the use of penalty envelopes, the franking privilege, and the limit of weight of mail matter.

Redemption.—The receipt and disposition of damaged

and unsalable stamped paper returned by postmasters for redemption and credit.

Fourth Assistant Postmaster-General. — The Fourth Assistant Postmaster-General has charge of the following divisions:

RURAL DELIVERY.—In this division all petitions for the establishment and extension of rural free delivery service are received and examined, and, if accepted, prepared for investigation. Through it all orders pertaining to the extension of existing service or installation of new service are issued, and all orders pertaining to appointment and discipline of rural letter carriers, together with all correspondence incident to these matters. Requisitions for such supplies as are furnished in connection with the rural delivery service are received and passed on by this division, and requisitions on the purchasing agent for the purchase of such supplies originate therein. All correspondence pertaining to the supervision and maintenance of the rural free delivery service, including the requirements for rural mail boxes, is handled in this division.

SUPPLIES.—Has custody of supplies for the postal service, and disburses the same upon proper requisition.

DEAD LETTERS.—Has charge of the treatment of all unmailable and undelivered mail matter which is sent to it for disposition; the enforcement of the prompt sending of such matter according to regulations; the duty of noting and correcting errors of postmasters connected with the delivery or withholding of mail matter, and the investigation, by correspondence, of complaints made with reference thereto; the verification and allowance of claims for credit by postmasters for postage-due stamps affixed to undelivered matter; the examination and forwarding or return of all letters which have failed of delivery; the inspection and return to the country of origin of undelivered foreign matter; recording and restoration to owners of letters and parcels which contain valuable inclosures; care and disposition of all money, negotiable paper, and other valuable articles found in undelivered matter and correspondence both foreign and domestic, relating to these subjects.

TOPOGRAPHY.—Has charge of the making, printing, and distribution of post-route maps, including the maps of the rural free delivery service.

DEPARTMENT OF THE NAVY.

Secretary of the Navy.—The Secretary of the Navy performs such duties as the President of the United States, who is Commander-in-Chief, may assign him, and has the general superintendence of construction, manning, armament, equipment, and employment of vessels of war. Salary, $12,000.

Assistant Secretary of the Navy.—The Assistant Secretary of the Navy performs such duties in the Navy Department as shall be prescribed by the Secretary of the Navy or may be required by law.

Chief Clerk.—The Chief Clerk has general charge of the records and correspondence of the Secretary's Office and performs such other duties as may be assigned to him by the Secretary of the Navy.

Bureau of Navigation.—The duties of the Bureau of Navigation comprise all that relates to the promulgation, record, and enforcement of the Secretary's orders to the fleets and to the officers of the Navy, except such orders as pertain to the Office of the Secretary; the education of officers and men, including the Naval Academy and technical schools for officers (except the War College and Torpedo School), the apprentice establishment, and schools for the technical education of enlisted men, and to the supervision and control of the Naval Home, Philadelphia; the enlistment and discharge of all enlisted persons, including appointed petty officers for general and special service. It controls all rendezvous and receiving ships, and provides transportation for all enlisted persons and appointed petty officers; establishes the complement of the crews of all vessels in commission; keeps the records of service of all squadrons, ships, officers, and men, and prepares the annual Naval Register for publication; has under its direction the preparation, revision, and enforcement of all tactics, drill books, signal codes, cipher codes, and the uniform regulations.

Bureau of Yards and Docks.—The duties of the Bureau of Yards and Docks comprise all that relates to the planning, construction, and maintenance of all docks (including dry docks), wharves, slips, piers, quay walls, and buildings of all kinds, for whatever purpose needed, within the limits of the navy yards, but not of hospitals and magazines outside of those limits, nor of buildings for which it does not estimate. It repairs and furnishes all buildings, stores, and offices in the several navy yards, and is charged with the purchase, sale, and transfer of all lands and buildings connected with the navy yards; has under its sole control the general administration of the navy yards; provides and has sole control of all landings, derricks, shears, cranes, sewers, dredging, railway tracks, cars, and wheels, trucks, grading, paving, walks, shade trees, inclosure walls and fences, ditching, reservoirs, cisterns, fire engines and apparatus, all watchmen, and all things necessary, including labor, for the cleaning of the yards and the protection of the public property.

Bureau of Equipment.—The duties of the Bureau of Equipment comprise all that relates to the equipment of all vessels with rigging, sails, anchors, yeomen's stores, furniture not provided by other bureaus, navigation stores and supplies of all kinds, including nautical and navigating instruments and books, stationery and blank books for commanding and navigating officers ashore and afloat, binnacles, flags, signal lights, running lights, and standing lights on board vessels, including all electrical apparatus for lighting purposes and searchlights, logs, leads, lines, and glasses, log books, ships' libraries, illuminating oil for all purposes, except that used in the engineer department of steamers, and fuel for steamers, the ropewalks, and the shops for making anchors and cables, rigging, sails, galleys and cooking utensils, the Naval Observatory, Nautical Almanac, compass offices, and pilotage. It has under its control the Hydrographic Office, the collection of foreign surveys, publication and supply charts, sailing directions, and nautical works, and the dissemination of nautical and hydrographic information to the Navy and mercantile marine.

Bureau of Ordnance.—The duties of the Bureau of Ordnance comprise all that relates to the torpedo station, naval proving grounds, and magazines on shore; to the manufacture of offensive and defensive arms and apparatus (including torpedoes), all ammunition and war explosives; procures all machinery, apparatus, equipment, material, and supplies required by or for use with the above; recommends the armament to be carried by vessels of the Navy; the material, kind, and quality of the armor; the interior dimensions of revolving turrets and their requirements as regards rotation. It fixes, within the carrying power of vessels as determined by the Bureau of Construction and Repair, the location and command of the armament, and distributes the thickness of the armor; inspects the installation of the permanent fixtures of the armament and its accessories on board ship, and the methods of storing, handling, and transporting ammunition and torpedoes; designs and constructs turret ammunition hoists; determines the requirements of all ammunition hoists, and the method of construction of armories and ammunition rooms on board ship, and in conjunction with the Bureau of Construction and Repair, determines upon their location and that of ammunition hoists. It installs the armament and its accessories which are not permanently attached to any portion of the structure of the hull, excepting turret guns, turret mounts, and ammunition hoists, etc.; has cognizance of all electrically operated ammunition hoists, rammers, and gun-elevating gear which are in turrets, of electric range finders, of electric training and elevating gear for gun mounts not in turrets, of electrically operated air compressors for charging torpedoes, and of all battle-order and range transmitters and indicators; designs internal arrangements of buildings at navy yards where ordnance work is performed; designs, erects, and maintains all shops and buildings constructed for its own purposes outside the limits of navy yards. It is charged with the purchase, sale, and transfer of all land

and buildings in connection therewith, except at navy yards, and with the preservation of public property under its control. It determines upon and procures all the tools, stores, stationery, blank books, forms, material, means, and appliances of every kind required in its shops, including fuel and transportation. It superintends all work done under it, and estimates for and defrays from its own funds the cost necessary to carry out its duties as above defined.

Bureau of Construction and Repair.—The duties of the Bureau of Construction and Repair comprise the responsibility for the structural strength and stability of all ships built for the Navy; all that relates to designing, building, fitting, and repairing the hulls of ships, turrets, spars, capstans, windlasses, steering gear, and ventilating apparatus, and, after consultation with the Bureau of Ordnance, and according to the requirements thereof as determined by that Bureau, the designing, construction, and installation of independent ammunition hoists, and the installation of the permanent fixtures of all other ammunition hoists and their appurtenances; placing and securing armor after the material, quality, and distribution of thickness have been determined by the Bureau of Ordnance; placing and securing on board ship, to the satisfaction of the Bureau of Ordnance, the permanent fixtures of the armament and its accessories as manufactured and supplied by that Bureau; installing the turret guns, turret mounts, and ammunition hoists, and such other mounts as require simultaneous structural work in connection with installation or removal; care and preservation of ships in ordinary, and requisitioning for or manufacturing all the equipage and supplies for ships prescribed by the authorized allowance lists. The Bureau of Construction and Repair also, after conference with the Bureau of Ordnance, designs the arrangements for centering the turrets, the character of the roller paths and their supports, and furnishes that Bureau every opportunity to inspect the installation on board of all permanent fixtures of the armament and accessories supplied by said Bureau. It has cognizance of all electric turret-turning machinery and of all electrically operated ammunition hoists (except turret hoists), the same to conform to the requirements of the Bureau of Ordnance as to power, speed, and control. It also has cognizance of stationary electrically operated fans or blowers for hull ventilation, boat cranes, deck winches, capstans, steering engines and telemotors therefor, and hand pumps not in the engine or fire rooms, and of electric launches and other boats supplied with electric motive power. It has charge of the docking of ships, and also designs the slips and the various buildings and shops, so far as their internal arrangements are concerned, where its work is executed, and is charged with the operating and cleaning of dry docks.

Bureau of Steam Engineering.—The duties of the Bureau of Steam Engineering comprise all that relates to the designing, building, fitting out, repairing, and engineering of the steam machinery used for the propulsion of naval vessels, and will also include steam pumps, steam heaters and connections, and the steam machinery necessary for actuating the apparatus by which turrets are turned.

Bureau of Medicine and Surgery.—The duties of the Bureau of Medicine and Surgery comprise all that relates to laboratories, naval hospitals, and dispensaries, the furnishing of all supplies, medicines, and instruments required in the Medical Department of the Navy; has sole control of all buildings, erected for its purposes, and determines upon and furnishes all the stores, etc., used in the medical and hospital departments, materials, instruments, means, and appliances of every kind used for its purposes, and controls their inspection, storing, transportation, and preparation; designs, erects, furnishes, and maintains all the buildings constructed for its purposes outside the limits of the navy yards, and for which it may have estimated; is charged with the purchase, sale, and transfer of all land and buildings in connection therewith, and with the preservation of the public property under its control; designs the various buildings erected within navy yards for its purposes so far only as their internal arrangements are concerned, and after their completion has exclusive control of the same, and makes all contracts for and superintends all the work done under it.

Bureau of Supplies and Accounts.—The duties of the Bureau of Supplies and Accounts comprise all that relates to supplying the Navy with provisions, clothing, small stores, fresh water, and contingent stores in the Paymaster's Department; the reception, care, and custody of all stores not exempt by order from the general storekeeper's system, and the keeping of a proper system of accounts regarding the same; the purchase, at shore stations within the United States, of stores and supplies and their custody, transfer, and issue, upon authorized requisitions, except those of the Bureau of Medicine and Surgery, the Marine Corps, and those exempt by Regulation Circular No. 51.

Office of the Judge-Advocate-General.—The duties of the Judge-Advocate-General of the Navy are as follows: To revise, report upon, and have recorded the proceedings of all courts-marshal, courts of inquiry, and boards for the examination of officers for retirement and promotion in the naval service; to prepare charges and specifications for courts-martial, and the necessary orders convening courts-martial in cases where such courts are ordered by the Secretary of the Navy; to prepare general orders promulgating the final action of the reviewing authority in court-martial cases; to prepare the necessary orders convening courts of inquiry and boards for the examination of officers for promotion and retirement, and for the examination of candidates for appointment as commissioned officers in the Navy other than midshipmen, and to conduct all official correspondence relating to such courts and boards. It is also the duty of the Judge-Advocate-General to examine and report upon all questions relating to the construction of the regulations, including those relating to rank and precedence, promotions, and retirements, and those relating to the validity of the proceedings in court-martial cases; all matters relating to the supervision and control of naval prisons and prisoners; the removal of the mark of desertion; the correction of records of service and reporting thereupon in the regular or volunteer navy; certification of discharge in true name; pardons; bills and resolutions introduced in Congress relating to the personnel and referred to the Department for report; reference to the Comptroller of the Treasury with regard to pay and allowances of the personnel; questions involving points of law concerning the personnel; and to conduct the correspondence respecting the foregoing duties.

Office of the Solicitor.—The duties of the Solicitor are to examine and report upon questions of law including the drafting and interpretation of statutes, and matters submitted to the accounting officers not relating to the personnel; preparation of advertisements, proposals, and contracts; insurance; patents; the sufficiency of official contract and other bonds and guaranties; acquisition of and questions affecting lands; proceedings in the civil courts by or against the Government or its officers; claims by or against the Government; questions submitted to the Attorney-General; bills and Congressional resolutions and inquiries not relating to the personnel and not elsewhere assigned; and to conduct the correspondence respecting the foregoing duties. It is also the duty of the Solicitor to render opinion upon any matter or question of law when directed so to do by the Secretary.

Commandant of the Marine Corps.—The Commandant of the Marine Corps is responsible to the Secretary of the Navy for the general efficiency and discipline of the corps; makes such distribution of officers and men for duty at the several shore stations as shall appear to him to be most advantageous for the interests of the service; furnishes guards for vessels of the Navy, according to the authorized scale of allowance; under the direction of the Secretary of the Navy, issues orders for the movement of officers and troops, and such other orders and instructions for their guidance as may be necessary; and has charge and exercises general supervision and control of the recruiting service of the corps, and of the necessary expenses thereof, including the establishment of recruiting offices.

DEPARTMENT OF THE INTERIOR.

Secretary of the Interior.—The Secretary of the Interior is charged with the supervision of public business relating to patents for inventions; pensions and bounty lands; the public lands and surveys; the Indians; education; the Geological Survey and Reclamation Service, the Hot Springs Reservation, Arkansas, Yellowstone National Park, Wyoming, and the Yosemite, Sequoia, and General Grant parks, California and other National parks; distribution of appropriations for agricultural and mechanical colleges in the States and Territories; and supervision of certain hospitals and eleemosynary institutions in the District of Columbia. He also exercises certain powers and duties in relation to the Territories of the United States.

First Assistant Secretary of the Interior.—This officer performs such duties in connection with the matters over which the Secretary of the Interior has jurisdiction as that officer may prescribe or as may be required by law. His duties as a rule are in connection with public lands, national parks, the eleemosynary institutions of the District of Columbia, and the various appropriations over which the Department has jurisdiction.

Assistant Secretary of the Interior.—This officer performs such duties in connection with the matters over which the Secretary of the Interior has jurisdiction as that officer may prescribe or may be required by law. His duties as a rule are in connection with matters coming from the Indian Office, the Patent Office, the Bureau of Pensions, the Bureau of Education, and various miscellaneous matters over which the Department has jurisdiction.

Chief Clerk.—This officer, under the direction of the Secretary, has supervision over the clerks and employees; enforces the general regulations of the Department; is superintendent of the buildings occupied by the Department; has charge of correspondence relating to miscellaneous matters; and is required to report to the Secretary any existing defects he may be aware of in the arrangement and dispatch of business.

Commissioner of Patents.—The Commissioner of Patents is charged with the administration of the patent laws, and supervises all matters relating to the issue of letters patent for new and useful inventions, discoveries, and improvements thereon, and also the registration of trade-marks, prints and labels. He is by statute made the tribunal of last resort in the Patent Office, and has appellate jurisdiction in the trial of interference cases, of the patentability of inventions, and of registration of trade-marks. He is aided by an Assistant Commissioner and a chief clerk.

Commissioner of Pensions.—The Commissioner of Pensions supervises the examination and adjudication of all claims arising under laws passed by Congress granting bounty land or pension on account of service in the Army or Navy during the Revolutionary War and all subsequent wars in which the United States has been engaged. He is aided by two Deputy Commissioners and the chief clerk of the Bureau, each of whom has supervision over business arising in divisions of the Bureau assigned, under order of the Commissioner, to his immediate charge.

Commissioner of the General Land Office.—The Commissioner of the General Land Office performs all executive duties appertaining to the surveying and sale of the public lands of the United States; also such as relate to private claims of land and the adjudication of, and the issuance of patents for, all grants of public land, and such other duties pertaining to the public domain as may be directed by Congress. He is aided by an Assistant Commissioner, a chief clerk, and a recorder.

Commissioner of Indian Affairs.—The Commissioner of Indian Affairs has charge of the Indian tribes of the United States (exclusive of Alaska)—their lands, moneys, schools, purchase of supplies, and general welfare. He reports annually as to the condition of each tribe. He is aided by an Assistant Commissioner and a chief clerk.

Commissioner of Education.—The duties of the Commissioner of Education are to collect such statistics and facts as shall show the condition and progress of education in the several States and Territories, and to diffuse such information respecting the organization and management of schools and school systems and methods of teaching as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country. He is also charged with the education of natives in Alaska, and the administration of the endowment fund for the support of colleges for the benefit of agriculture and mechanic arts.

Director of the Geological Survey.—The Director of the Geological Survey has charge of the classification of public lands and examination of the geological structure, mineral resources, and products of the national domain, and the survey of forest reserves, including the preparation of topographic and geologic maps; also the measurement of streams and determination of the water supply of the United States, including the investigation of underground waters and artesian wells.

Director of the Reclamation Service.—The Director of the Reclamation Service has charge of the reclamation of arid lands, including the engineering operations to be carried on by the use of the reclamation fund created by act of June 17, 1902 (32 Stat. L., 388), from proceeds of sales of public lands. He recommends to the Secretary the approval of reclamation projects and the allotment of amounts estimated as necessary therefor. He is assisted by a chief engineer, who has charge of engineering matters, and six supervising engineers in charge of field divisions.

DEPARTMENT OF AGRICULTURE.

Secretary of Agriculture.—The Secretary exercises personal supervision of public business relating to the agricultural industry. He appoints all the officers and employees of the Department with the exception of the Assistant Secretary and the Chief of the Weather Bureau, who are appointed by the President. and directs the management of all the bureaus, divisions, offices, and the Forest Service, embraced in the Department. He exercises advisory supervision over agricultural experiment stations, which receive aid from the National Treasury; has control of the quarantine stations for imported cattle, of interstate quarantine rendered necessary by sheep and cattle diseases, and of the inspection of cattle-carrying vessels; and directs the inspection of domestic and imported food products under the meat inspection and pure food and drugs laws. He is charged with the duty of issuing rules and regulations for the protection, maintenance, and care of the National Forest Reserves. He also is charged with carrying into effect the laws prohibiting the transportation by interstate commerce of game killed in violation of local laws and excluding from importation certain noxious animals, and has authority to control the importation of other animals. Salary, $12,000.

Assistant Secretary of Agriculture.—The Assistant Secretary of Agriculture performs such duties as may be required by law or prescribed by the Secretary. He also becomes the Acting Secretary of Agriculture in the absence of the Secretary.

Chief Clerk.—The Chief Clerk has the general supervision of the clerks and employees; of the order of business, and of all expenditures from appropriations for contingent expenses, stationery, etc.; is responsible for the enforcement of the general regulations of the Department; and is custodian of the buildings occupied by the Department of Agriculture.

Solicitor.—The Solicitor acts as the legal adviser of the Secretary, and has charge of the preparation and supervision of all legal papers to which the Department is a party, and of all communications to the Department of Justice and to the various officers thereof, including United States attorneys. He examines and approves, in advance of issue, all orders and regulations promulgated by the Secretary under statutory authority. He represents the Department in all legal proceedings arising under the laws entrusted to the Department for execution, and prosecutes applications for patents by

employees of the Department. He is a member of the Board of Food and Drug Inspection. His duties are performed under the immediate supervision of the Secretary.

Appointment Clerk.—The Appointment Clerk is charged by the Secretary with the decision of all questions affecting appointments, transfers, promotions, reductions, details, furloughs, and removals in their relation to the civil service law and regulations, and with the preparation of all papers necessitated thereby. He has charge of all correspondence of the Department with the United States Civil Service Commission, and of all certificates and communications issued by that Commission to the Department, and deals with all questions affecting positions in the classified service. He supervises the preparation of all documents to be submitted to the Secretary of Agriculture for his signature in making appointments, transfers, promotions, reductions, furloughs, and removals in the Department of Agriculture. He is the recorder and custodian of the oaths of office and personal reports of all persons appointed in the Department; and of all reports of the several chiefs of bureaus, divisions, and offices respecting the efficiency of the several clerks and employees under their respective supervision in the Department. He has the custody and use of the Department seal.

Weather Bureau.—The Chief of the Weather Bureau, under the direction of the Secretary of Agriculture, has charge of the forecasting of weather; the issue and display of weather forecasts and storm, cold-wave, frost, and flood warnings for the benefit of agriculture, commerce, and navigation; the gaging and reporting of rivers; the maintenance and operation of seacoast telegraph and telephone lines, and the collection and transmission of marine intelligence for the benefit of commerce and navigation; the reporting of temperature and rainfall conditions for the corn, wheat, cotton, sugar, rice, and other interests; the distribution of meteorological information in the interests of agriculture and commerce, and the taking of such meterological observations as may be necessary to establish and record the climatic conditions of the United States or as are essential for the proper execution of the foregoing duties.

Bureau of Animal Industry.—The Bureau of Animal Industry conducts the inspection of animals, meats, and meat food products under the act of Congress of June 30, 1906, and has charge of the inspection of import and export animals, the inspection of vessels for the transportation of export animals, and the quarantine stations for imported live stock, generally supervises the interstate movement of animals, and reports on the condition and means of improving the animal industries of the country. It makes investigations as to the existence of dangerous communicable diseases of live stock, superintends the measures for their control and eradication, and makes original scientific investigations as to the nature and prevention of such diseases. It makes investigations concerning the breeding and feeding of animals and in regard to dairy subjects, inspects and certifies dairy products for export, and supervises the manufacture of and interstate commerce in renovated butter.

Bureau of Plant Industry.—The Bureau of Plant Industry studies plant life in all of its relations to agriculture. It investigates the diseases of plants and carries on field tests in the prevention of diseases. It studies the improvement of crops by breeding and selection, maintains demonstration farms, and carries on investigations with a view to introducing better methods of farm practice. It conducts agricultural explorations in foreign countries for the purpose of securing new plants and seeds for introduction into the United States. It studies fruits, their adaptability to various climates, and the methods of harvesting, handling, storing, and marketing them. It determines the adaptability of tropical and sub-tropical plants to the newly acquired territories of the United States. It has charge of the purchase and distribution of Congressional seeds, studies the adaptability of seeds of different regions and investigates their purity and vitality. It maintains tea gardens with a view to the production of tea in this country. It carries on investigations relative to drug plants and plants poisonous to stock. It conducts extensive work upon horticultural crops grown under glass and elsewhere.

Forest Service.—The Forest Service is charged with the administration of the National Forests. It gives practical advice in the conservative handling of national, State, and private forest lands, and in methods of utilizing forest products, investigates methods and kinds of trees for planting, and gives practical advice to tree planters; conducts operations in forest planting on the National Forests; studies commercially valuable trees to determine their best management and use; tests the strength and durability of construction timbers, railroad ties, and telephone poles, and methods of increasing their durability through seasoning and preservative treatment; investigates the control and prevention of forest fires, and other forest problems; and advises, when requested, concerning State legislation to encourage the holding and protecting of growing timber.

Bureau of Chemistry.—The Bureau of Chemistry makes such investigations and analyses as pertain in general to the interests of agriculture, dealing with fertilizers and agricultural products. It investigates the composition and adulteration of foods and the composition of field products in relation to their nutritive value and to the constituents which they derive from the soil, fertilizers, and the air. It examines foods and drugs for the purpose of determining whether such articles are adulterated or misbranded within the meaning of the Food and Drugs Act, June 30, 1906. Under this law it also inspects imported food products and excludes from entry those injurious to health or which are falsely branded or labeled. It inspects food products exported to foreign countries where physical and chemical tests are required for such products. It co-operates with the chemists of the agricultural experiment stations in all matters pertaining to the relations of chemistry to agricultural interests. It also co-operates with the other scientific divisions of the Department in all matters relating to chemistry, and conducts investigations of a chemical nature for other Departments of the Government at the request of their respective Secretaries.

Bureau of Statistics.—The Bureau of Statistics collects information as to crop areas, conditions, yields, values and allied data, and the numbers, values, and status of farm animals, through corps of county and township correspondents, State agents, special field agents, and other agencies, and obtains similar information from foreign countries through consular, agricultural, and commercial authorities. It records, tabulates, and co-ordinates statistics of agricultural production, distribution, and consumption, the authorized data of governments, institutes, societies, boards of trade, and individual experts; and issues a monthly crop report for the information of producers and consumers. It includes a division of production and distribution, which investigates subjects pertaining to agricultural production and consumption, demand and supply, values, transportation, the conditions affecting them, and disseminates through printed reports and otherwise the information collected.

Bureau of Soils.—The Bureau of Soils investigates soils in all their relations to climate and to organic life. It makes field investigations and prepares soil-survey maps showing the extent, distribution, and characteristic properties of all the important soil types found in various portions of the United States, and in its published reports suggests possible lines of improvement in the treatment, management, and use of these soils. It investigates and represents upon maps the distribution and concentration of alkali salts in soils of various portions of the arid regions. Through its laboratories it investigates the fundamental causes of the fertility or infertility of soils and the causes for low yields of crops. It also investigates the causes of soil erosion and the effects of soil erosion upon the agricultural efficiency of soils and investigates the methods for protecting agricultural soils from destructive erosion.

Bureau of Entomology.—The Bureau of Entomology obtains and disseminates information regarding injurious

insects affecting field crops, fruits, small fruits, and truck crops, forests and forest products, and stored products; studies insects in relation to diseases of man and other animals and as animal parasites; experiments with the introduction of beneficial insects and with the fungous and other diseases of insects, and conducts experiments and tests with insecticides and insecticide machinery. It is further charged with investigations in apiculture. The information gained is disseminated in the form of reports, bulletins, and circulars. A good deal of museum work is done in connection with the Department of Insects of the National Museum, and insects are identified for experiment stations and other public institutions and private individuals.

Bureau of Biological Survey.—The Bureau of Biological Survey investigates the economic relations of birds and mammals, recommends measures for the preservation of beneficial and the destruction of injurious species, and has been charged with carrying into effect the provisions of the Federal laws for the importation and protection of birds, contained in the act of Congress of May 25, 1900, and certain provisions of the game law of Alaska, contained in the act of May 11, 1908. It is intrusted with the care and maintenance of the Federal Bird Reservation in charge of the Department of Agriculture. It also studies the geographic distribution of animals and plants and maps the natural life zones of the country.

Division of Accounts and Disbursements.—The Division of Accounts and Disbursements audits, adjusts, and pays all accounts and claims against the Department; decides questions involving the expenditure of public funds; prepares advertisements and schedules for annual supplies, and letters of authority; writes, for the signature of the Secretary, all letters to the Treasury Department pertaining to fiscal matters; examines and signs requisitions for the purchase of supplies; issues bills of lading and requests for passenger and for freight transportation; prepares the annual estimates of appropriations; prepares annual fiscal reports to Congress; and transacts all other business relating to the financial interests of the Department.

Division of Publications.—The Division of Publications is charged with the supervision of the publication, printing, indexing, illustration, and distribution of the work of the Department. It edits, prepares for the printer, and reads the proof of all the bulletins, reports, circulars, blanks, blank books, etc., ordered for the various bureaus, divisions, and offices, with the exception of those of the Weather Bureau, and keeps the official record of all expenditures for printing and binding. It has immediate charge of the Yearbook and Farmers' Bulletins and controls the general printing and Farmers' Bulletin funds, and conducts all correspondence with the Government Printing Office. It issues, in the form of press notices, official information of interest to agriculturists, and distributes to agricultural publications and to newspaper correspondents notices and synopsis of Department publications, and distributes all publications issued by the Department, with the exception of those turned over by law to the Superintendent of Documents for sale at the price fixed by him.

Library.—The Librarian of the Department library purchases all books and periodicals and supervises their arrangement and cataloguing; prepares for publication bibliographies of special subjects and a quarterly bulletin containing current accessions to the library; also has charge of the foreign mailing lists of the Department publications.

Office of Experiment Stations.—The Office of Experiment Stations represents the Department in its relation to the agricultural colleges and experiment stations, which are now in operation in all the States and Territories, and directly manages the experiment stations in Alaska, Hawaii, Porto Rico, and Guam. It seeks to promote the interests of agricultural education and investigation throughout the United States. It collects and disseminates general information regarding the colleges and stations, and publishes accounts of agricultural investigations at home and abroad. It also indicates lines of inquiry, aids in the conduct of co-operative experiments, reports upon the expenditures and work of the stations, and in general furnishes them with such advice and assistance as will best promote the purposes for which they were established. It investigates and reports upon the progress of the farmers' institutes and agricultural schools in the several States and Territories, and aids in making such organizations more effective for the dissemination of the results of the work of the Department and the stations. It is also charged with investigations on the nutritive value and economy of human foods and on irrigation and drainage and other phases of agricultural engineering, which are largely conducted in co-operation with the colleges and stations.

Office of Public Roads.—The Office of Public Roads collects information in regard to systems of road management; investigates the best methods of road making and the best kinds of road-making materials throughout the United States, and furnishes expert advice on road construction, maintenance, and administration; investigates the chemical and physical character of road materials; co-operates with schools and colleges in highway engineering instruction; reports the results of its investigations and experiments, and prepares and publishes bulletins and reports.

DEPARTMENT OF COMMERCE AND LABOR.

Secretary of Commerce and Labor.—The Secretary of Commerce and Labor is charged with the work of promoting the commerce of the United States, and its mining, manufacturing, shipping, fishery, transportation, and labor interests. His duties also comprise the investigation of the organization and management of corporations (excepting railroads) engaged in interstate commerce; the gathering and publication of information regarding labor interests and labor controversies in this and other countries; the administration of the Light House Service, and the aid and protection to shipping thereby, the taking of the census, and the collection and publication of statistical information connected therewith; the making of coast and geodetic surveys; the collecting of statistics relating to foreign and domestic commerce; the inspection of steamboats, and the enforcement of laws relating thereto for the protection of life and property; the supervision of the fisheries as administered by the Federal Government; the supervision and control of the Alaskan fur-seal, salmon, and other fisheries; the jurisdiction over merchant vessels, their registry, licensing, measurement, entry, clearance, transfers, movement of their cargoes and passengers, and laws relating thereto, and to seamen of the United States; the supervision of the immigration of aliens, and the enforcement of the laws relating thereto, and to the exclusion of Chinese; the custody, construction, maintenance, and application of standards of weights and measurements; and the gathering and supplying of information regarding industries and markets for the fostering of manufacturing. He has power to call upon other Departments for statistical data obtained by them.

For the proper accomplishment of any or all of the aforesaid work, it is by law provided that all duties performed, and all the powers and authority possessed or exercised, at the date of the creation of said Department, by the head of any Executive Department in and over any bureau, office, officer, board, branch, or division of the public service transferred to said Department, or any business arising therefrom, or pertaining thereto, or in relation to the duties and authority conferred by law upon such bureau, office, officer, board, branch, or division of the public service, whether of appellate or advisory character or otherwise, are vested in and exercised by the Secretary of Commerce and Labor.

It is his further duty to make such special investigations and furnish such information to the President or Congress as may be required by them on the foregoing subject-matters, and to make annual reports to Congress upon the work of said Department. Salary, $12,000.

Chief Clerk.—The Chief Clerk, under the immediate direction of the Secretary, has the superintendency of all buildings occupied by the Department in Washington, D. C.; the direction of the watchmen, engineers,

mechanics, firemen, laborers, and other employees connected with the care and protection of the Department buildings; the care of the horses, wagons, and carriages employed; the expenditure of the appropriations for contingent expenses and rents; the receipt, distribution, and transmission of the mail; the custody of the records and files of the Secretary's Office; and the charge of all business of the Secretary's Office unassigned.

Disbursing Clerk.—The Disbursing Clerk is charged by the Secretary of Commerce and Labor with the duty of preparing all requisitions for the advance of public funds from appropriations for the Department of Commerce and Labor to disbursing clerks, special disbursing agents, and officers of the Light House Establishment charged with the disbursement of public funds; the keeping of appropriation ledgers relating to the advance and expenditure of three hundred and twenty-five items of appropriations; the administrative examination required by the Department of all accounts submitted by bureau disbursing officers and agents. He has charge of the issuing, recording, and accounting for Government requests for transportation issued to officers of the Department for official travel; the audit and payment of all vouchers and accounts submitted from the Office of the Secretary of Commerce and Labor, the Bureaus of Corporations, Manufactures, Labor, Light House Board, Statistics, Office of the Supervising Inspector-General, Steamboat Inspection Service, Steamboat Inspection Service at Large; Navigation, Immigration and Naturalization; Immigration Service at Large; Standards and Fisheries, and the general accounting of the Department.

Division of Appointments.—The chief of the Division of Appointments is charged by the Secretary with the supervision of all matters relating to appointments, transfers, promotions, reductions, and removals, including applications for, and recommendations concerning the same, and the correspondence connected therewith; the consideration of applications for leave of absence of clerks and employees in the District of Columbia, the preparation and submission of all questions affecting the personnel of the Department in its relations to the civil service law and rules; the preparation of nominations sent to the Senate and of the commissions and appointments of all officers and employees of the Department; the preparation of official bonds; the compilation of matter for the official register and other statistics in regard to the personnel, and the custody of oaths of office, records pertaining to official bonds, service records of officers and employees, the correspondence and report relating to the personnel, the reports of Bureau officers respecting the efficiency of employees, and the records relating to leaves of absence.

Division of Printing.—The chief of the Division of Printing is charged by the Secretary of Commerce and Labor with the conduct of all business the Department transacts with the Government Printing Office, excepting that of the Bureau of the Census; the general supervision of printing, including the editing and preparation of copy, illustrating and binding, and the distribution of all publications issued by the Office of the Secretary. All blank books and blank forms, and the printed stationery of all kinds used by the bureau and offices of the Department in Washington and the various outside services of the Department are in his custody and are supplied by him. The advertising done by the Department is in his charge. He also keeps a record of all expenditures for the publishing work of the Department, conducts the correspondence it entails, and is a member of the Department's advisory committee on printing.

Division of Supplies.—Under the direction of the Chief Clerk the chief of the Division of Supplies has personal supervision of all the work incident to the purchase and distribution of supplies for the Department proper and for the services of the Department outside of Washington, and of the keeping of detailed accounts of all expenditures from the appropriation for contingent expenses of the Department. He receives, verifies, and preserves the semi-annual returns of property from the offices and bureaus of the Department which are supplied from the contingent appropriation, and examines and reports on the semi-annual property returns of all other bureaus and services.

Bureau of Corporations.—The Bureau of Corporations is authorized, under the direction of the Secretary of Commerce and Labor, to investigate the organization, conduct, and management of the business of any corporation, joint stock company, or corporate combination engaged in interstate or foreign commerce, except common carriers subject to the interstate commerce act; to gather such information and data as will enable the President to make recommendation to Congress for legislation for the regulation of interstate and foreign commerce; to report the data so collected to the President from time to time as he may require, and to make public such part of said information as the President may direct.

It is also the duty of the Bureau of Corporations, under the direction of the Secretary of Commerce and Labor, to gather, compile, publish, and supply useful information concerning corporations engaged in interstate or foreign commerce, including corporations engaged in insurance.

Bureau of Manufactures.—It is the province and duty of the Bureau of Manufactures, under the direction of the Secretary, to foster, promote, and develop the various manufacturing industries of the United States, and markets for the same at home and abroad; by gathering and publishing all available and useful information concerning such industries and markets; and, through the Secretary of State, to gather and compile from the reports of consular officers and commercial agents such valuable and material information as will accomplish the objects above set forth.

The Bureau publishes daily and monthly the reports received from United States consuls and special agents of the Department, and special reports on various subjects made by consuls from time to time; also, the annual reports of consular officers laid before Congress, entitled "Commercial Relations of the United States."

Bureau of Labor.—The Bureau of Labor is charged with the duty of acquiring and diffusing among the people of the United States useful information on subjects connected with labor in the most general and comprehensive sense of that word, and especially upon its relations to capital, the hours of labor, the earnings of laboring men and women, and the means of promoting their material, social, intellectual, and moral prosperity.

It is especially charged to investigate the causes of and facts relating to all controversies and disputes between employers and employees as they may occur, and which may happen to interfere with the welfare of the people of the several States.

It is also authorized, by act of March 2, 1895, to publish a bulletin on the condition of labor in this and other countries, condensations of State and foreign labor reports, facts as to conditions of employment, and such other facts as may be deemed of value to the industrial interests of the United States. This bulletin is issued every other month.

By section 76 of an act to provide a government for the Territory of Hawaii, approved April 30, 1900, it is made the duty of the Bureau to collect and present in annual reports statistical details relating to all departments of labor in the Territory of Hawaii, especially those statistics which relate to the commercial, industrial, social, educational, and sanitary condition of the laboring classes.

Light-House Board.—The Light-House Board has charge, under the superintendence of the Secretary of Commerce and Labor, of all administrative duties relating to the construction and maintenance of light-houses, light vessels, light-house depots, beacons, fog signals, buoys, and their appendages, and has charge of all records and property appertaining to the Light-House Establishment.

Bureau of the Census.—The Bureau of the Census is charged with the duty of taking the periodical censuses of the United States and of collecting such special statistics as are required by Congress, including the collection in 1905 of the statistics of manufacturing establishments conducted under the factory system, and the collection

annually of statistics of births and deaths in registration areas, statistics of the cotton production of the country as returned by the ginners, the consumption of cotton, and (by transfer from the Bureau of Labor) statistics of cities of 30,000 or more inhabitants.

Coast and Geodetic Survey.—The Coast and Geodetic Survey is charged with the survey of the coasts of the United States and coasts under the jurisdiction thereof and the publication of charts covering said coasts. This includes base measure, triangulation, topography, and hydrography along said coasts; the survey of rivers to the head of tide-water or ship navigation; deep-sea soundings, temperature, and current observations along said coasts and throughout the Gulf and Japan streams; magnetic observations and researches, and the publication of maps showing the variations of terrestrial magnetism; gravity research; determination of heights; the determination of geographic positions by astronomic observations for latitude, longitude, and azimuth, and by triangulation, to furnish reference points for State surveys.

The results obtained are published in annual reports, and in special publications; charts upon various scales, including sailing charts, general charts of the coast, and harbor charts; tide tables issued annually, in advance; Coast Pilots, with sailing directions covering the navigable waters; notices to Mariners, issued monthly and containing current information necessary for safe navigation; catalogues of charts and publications, and such other special publications as may be required to carry out the organic law governing the Survey.

Bureau of Statistics.—The Bureau of Statistics collects and publishes the statistics of our foreign commerce, embracing tables showing the imports and exports, respectively, by countries and customs districts; the transit trade inward and outward by countries and by customs districts; imported commodities warehoused, withdrawn from, and remaining in warehouse; the imports of merchandise entered for consumption, showing quantity, value, rates of duty, and amounts of duty collected on each article or class of articles; the inward and outward movement of tonnage in our foreign trade and the countries whence entered and for which cleared, distinguishing the nationalities of the foreign vessels.

The Bureau also collects and publishes information in regard to the leading commercial movements in our internal commerce, among which are the commerce of the Great Lakes; the commercial movements between interior centers, at Atlantic, Gulf, and Pacific seaports; shipments of coal and coke; ocean freight rates, etc.; and is also charged with the duty of collecting and publishing information in regard to the tariffs of foreign countries.

Steamboat Inspection Service.—The Steamboat Inspection Service is charged with the duty of inspecting steam vessels, the licensing of the officers of vessels, and the administration of the laws relating to such vessels and their officers for the protection of life and property.

The Supervising Inspector-General and the supervising inspectors constitute a board that meets annually at Washington, and establishes regulations for carrying out the provisions of the steamboat inspection laws.

Bureau of Fisheries.—The work of the Bureau of Fisheries comprises (1) the propagation of useful food fishes, including lobsters, oysters, and other shellfish, and their distribution to suitable waters; (2) the inquiry into the causes of decrease of food fishes in the lakes, rivers, and coast waters of the United States, the study of the waters of the coast and interior in the interest of fish-culture, and the investigation of the fishing grounds of the Atlantic, Gulf, and Pacific coasts, with the view of determining their food resources and the development of the commercial fisheries; (3) the collection and compilation of the statistics of the fisheries and the study of their methods and relations.

Bureau of Navigation.—The Bureau of Navigation is charged with general superintendence of the commercial marine and merchant seamen of the United States, except so far as supervision is lodged with other officers of the Government. It is specially charged with the decision of all questions relating to the issue of registers, enrollments, and licenses of vessels and the filing of those documents, with the supervision of laws relating to the admeasurement, letters, and numbers of vessels, and with the final decision of questions concerning the collection and refund of tonnage taxes. It is empowered to change the names of vessels, prepares annually a list of vessels of the United States, and reports annually to the Secretary of Commerce and Labor the operations of the laws relative to navigation.

Bureau of Immigration and Naturalization.—The Bureau of Immigration and Naturalization is charged with the administration of the laws relating to immigration and of the Chinese exclusion laws; also the naturalization laws. It supervises all expenditures under the appropriations for "Expenses of Regulating Immigration," "Enforcement of the Chinese Exclusion Act," and "Enforcement of the Naturalization Laws." It causes alleged violations of the immigration, Chinese exclusion, and alien contract labor laws to be investigated, and when prosecution is deemed advisable submits evidence for that purpose to the proper United States district attorney. It also has charge of distributing information to arriving aliens regarding desirable places of settlement, etc.

Bureau of Standards.—The functions of the Bureau of Standards are as follows: The custody of the standards; the comparison of the standards used in scientific investigations, engineering, manufacturing, commerce, and educational institutions with the standards adopted or recognized by the Government; the construction, when necessary, of standards, their multiples and subdivisions; the testing and calibration of standard measuring apparatus; the solution of problems which arise in connection with standards; the determination of physical constants and properties of materials, when such data are of great importance to scientific or manufacturing interests and are not to be obtained of sufficient accuracy elsewhere. The Bureau is authorized to exercise its functions for the Government of the United States, for any State or municipal government within the United States, or for any scientific society, educational institution, firm, corporation, or individual within the United States engaged in manufacturing or other pursuits requiring the use of standards or standard measuring instruments. For all comparisons, calibrations, tests, or investigations, except those performed for the Government of the United States or State governments, a reasonable fee will be charged.

LEGISLATIVE BRANCH OF THE GOVERNMENT.

THE CONGRESS OF THE UNITED STATES.

Composition.—The legislative power of the Government is vested in its Congress. The Congress is composed of two branches or houses, an upper and a lower, or a Senate and House of Representatives; the former standing for the States integrally and federally, the latter for the people at large. It is not uncommon to designate the House of Representatives as the popular branch of Congress. The period of time, two years, for which a member of the House of Representatives is elected, determines the period of a Congress. The Congress must meet once a year, and the time of meeting is the first Monday in December. It may be called into special session by the President. The first regular session of each Congress is called the long-session, and terminates at the will of Congress. The second regular session is called the short session, and terminates on the fourth of March of every second year. Congresses are denominated by numbers; thus, the one which met on December 2, 1901, was the Fifty-seventh Congress. The number of States fixes the number of members for the Senate. The population as ascertained at each census, and the apportionment law, fix the number of members of the House of Representatives.

Senate.—The United States Senate is composed of two members from each State; that is, when there are forty-six States there are ninety-two Senators. The qualifications and manner of electing Senators, the power

and duty of the Senate, are prescribed in detail in the Constitution. The length of a Senatorial term is six years and the salary of each Senator, $7,500 a year. The Senate is regarded as the higher or upper branch of the Congress. It differs in power from the House of Representatives, or lower and popular branch of the Congress, in the respect that it has a voice in the making of treaties and the selection of Executive appointments. At the same time it must defer in its power to the House, in the respect that it cannot originate bills for raising revenue. The Senate has the sole power to try impeachments. The Vice-President of the United States is the presiding officer, or President, of the Senate, but the Senate may elect a President pro tem. In legislating, bills presented by members of the Senate, or coming from the House of Representatives are generally referred to committees, standing or special, for examination and report. They are then presented to the Senate in a form agreed upon by a majority of the committee, and become the subject of debate and vote. Debates are, as a rule, fuller and more prolonged than in the House, and the machinery for facilitating legislation is more antiquated and clumsy. When the Senate cannot by a vote agree to the terms of a bill passed by the House or VICE VERSA, it is referred to a committee of conference of the two Houses, which committee generally succeeds in reconciling the differences.

House of Representatives.—This body is composed of members elected in their districts by popular vote, and whose number is regulated by the population as ascertained at each decennial census. The Congress fixes by law the apportionment after each census. The legislatures of the States divide the districts accordingly, or where they fail to do so, they make up their quota by electing Congressmen-at-Large. Each new House of Representatives elects its presiding officer, called the Speaker, who assigns the various committees and presides over the deliberations. Legislative work is carried on largely through the committees, whose reports of bills are open to debate on the floor. The rules of the House are far stricter than those of the Senate, and legislation is carried on more rapidly. Both Senate and House have full control of their own parliamentary rules and of the qualification and control of their own members. A member of the House of Representatives is commonly called a "Congressman," though this term is equally applicable to a Senator. Salary, $7,500 a year.

JUDICIAL BRANCH OF THE GOVERNMENT.

UNITED STATES SUPREME COURT.

Investment of Power.—The judicial power of the United States is invested, by the Constitution, in one Supreme Court and such inferior courts as Congress may establish. Judges of both the Supreme and inferior courts hold office during good behavior, and receive salaries that may not be diminished during their continuance in office.

Extent of Power.—This judicial power extends to all cases in law or equity arising under the Constitution, the laws of the United States and the treaties with foreign countries.

Organization.—The Supreme Court of the United States is composed of one Chief Justice and eight Associate Justices, appointed by the President and confirmed by the Senate, any six of whom constitute a quorum. The Justices have precedence according to the date of their commissions, or if two commissions bear the same date, then according to their ages.

Vacancies.—In case of a vacancy in the office of the Chief Justice, his duties devolve on the Associate Justice next in precedence to him until another associate is appointed.

Minor Officials.—The Supreme Court has power to appoint a chief clerk, deputy clerks and reporters.

United States Marshal.—The United States Marshal must attend the sessions of the Supreme Court and serve and execute its writs, processes and orders.

Sessions.—The Supreme Court holds one annual session beginning in October and ending in the following spring or early summer. It may hold special or adjourned terms.

Jurisdiction.—The United States Supreme Court has exclusive jurisdiction where a State is party to a suit, except where the dispute is between a State and its citizens, or between a State and the citizens of another State or aliens, in which last-named cases it has original but not exclusive jurisdiction. The trial of issues of fact in the Supreme Court, in actions at law against citizens, is by jury.

Oath.—Justices of the Supreme, Circuit and District Courts of the United States are sworn to administer justice without respect to persons and to do equal right to poor and rich, and that they will faithfully and impartially discharge and perform all the duties incumbent on them according to the best of their abilities and understanding and agreeably to the laws and Constitution of the United States.

Prohibition.—No Judge of the Supreme Court can exercise the profession or employment of counsel or attorney, or engage in legal practice during his term of office; if he does, he is liable to impeachment and removal.

Old Age.—A Supreme Court Judge, having held office for ten years, having reached the age of seventy years, and resigning, is entitled to the same annual salary he was receiving when he resigned.

Salary.—The Salary of the Chief Justice of the Supreme Court is $13,500, and of each of the Associate Justices, $12,500.

DISTRICT AND CIRCUIT COURTS.

Judicial Districts.—The judicial system of the United States reaches down to the people in the form of sub-divisions of the country into Judicial Districts, each of which contains a United States District Court, presided over by a District Judge. They are courts of original jurisdiction, and appeals may be taken from them to the higher courts. As a rule, each State constitutes a Judicial District, but the larger and more populous States contain two or more. New York has four such Districts, Pennsylvania three, Texas three, and so on. There are over eighty Judicial Districts and District Courts in the United States.

Circuit Courts.—Another division of the judicial system of the United States is into Judicial Circuits, in each one of which is held a Circuit Court, or a court intermediate between the District Courts and the Supreme Court. They have both original and appellate jurisdiction, and are presided over by two or three judges, according to size and importance. These Judges are appointed by the President of the United States for life, and receive a salary of $7,000 each.

Assignments.—A member of the Supreme Court of the United States is assigned to each one of these Circuits, and he is expected to visit it at stated intervals and to sit with other Judges in certain cases. Appeals are taken from the Circuit Courts to the Supreme Court.

Number.—There are nine of these Circuit Courts in the United States. The First Circuit embraces Maine, Massachusetts, New Hampshire, Rhode Island. Second, Connecticut, New York, Vermont. Third, Delaware, New Jersey, Pennsylvania. Fourth, Maryland, North Carolina, South Carolina, Virginia, West Virginia. Fifth, Alabama, Florida, Georgia, Louisiana, Mississippi, Texas. Sixth, Kentucky, Michigan, Ohio, Tennessee. Seventh, Illinois, Indiana, Wisconsin. Eighth, Arkansas, Colorado, Oklahoma, Iowa, Kansas, Minnesota, Missouri, Nebraska, New Mexico, North Dakota, South Dakota, Utah, Wyoming. Ninth, Alaska, Arizona, California, Idaho, Montana, Nevada, Oregon, Washington.

Circuit Courts of Appeal.—These constitute a system of new or modern courts created for the purpose of relieving the work of the Supreme Court, by hearing and determining finally a certain class of appeals mentioned in the law creating them. They are commensurate in number and extent with the Circuit Courts, and a full bench consists of the Justice of the Supreme Court for the Circuit, and the Judges of each Circuit. District Judges may also sit in these courts.

Court of Claims.—This court was established by act of Congress, February 24, 1855. The object of its creation was to adjudicate claims against the United States which, before its creation, properly came before Congress for adjustment and appropriation. It has proved to be a most useful court, relieving Congressional Committees of labor not suited to them, securing fuller and more satisfactory investigation and judgment, and ridding such claims of partisan pressure. It is composed of a Chief Justice and four Associate Justices. Appeals lie from its decisions to the Supreme Court.

Other Courts.—Other Courts of a national or semi-national character are the United States Court of Private Land Claims, presided over by a Chief Justice and four Associates, and a Court of Appeals for the District of Columbia, presided over by a Chief Justice and two Associate Justices.

CIVIL SERVICE COMMISSION AND MACHINERY.

Purpose.—The purpose of the Civil Service act, as declared in its title, is "to regulate and improve the civil service of the United States." It provides for the appointment of three Commissioners, not more than two of whom shall be adherents of the same political party, and makes it the duty of the Commission to aid the President, as he may request, in preparing suitable rules for carrying the act into effect. The act requires that the rules shall provide, among other things, for open competitive examinations for testing the fitness of applicants for the classified service, the making of appointments from among those passing with highest grades, an apportionment of appointments in the Departments at Washington among the States and Territories, a period of probation before absolute appointment, and the prohibition of the use of official authority to coerce the political action of any person or body. The act also provides for investigations touching the enforcement of the rules, and forbids, under penalty of fine or imprisonment, or both, the solicitation by any person in the service of the United States of contributions to be used for political purposes from persons in such service, or the collection of such contributions by any person in a Government building.

Classified Service.—There are about 352,000 positions in the executive civil service, of which 206,637 are classified subject either to competitive examination under the civil service rules or to a merit system governing appointments at navy yards. In the latter class are about 18,000 mechanics and skilled workmen. The total expenditures for salaries in the executive civil service is about $200,000,000. Persons merely employed as laborers or workmen and persons nominated for confirmation by the Senate are exempted from the requirements of classification. Within these limits certain classes of positions are excepted from examination, among them being employees at post offices not having free delivery, exclusive of postmasters of the fourth class in Maine, New Hampshire, Vermont, Massachusetts Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Wisconsin, and Michigan who were made subject to examination under an executive order approved November 30, 1908, Indians in the Indian service, attorneys, pension examining surgeons, deputy marshals, and a few employees whose duties are of an important confidential or fiduciary nature.

Examinations.—Examinations are held in every State and Territory at least twice a year. The examinations range in scope from technical, professional, or scientific subjects to those based wholly upon the age, physical condition, experience, and character as a workman of the applicant, and in some cases do not require ability to read or write.

Filling of Vacancies.—A vacancy is filled from among the three persons of the sex called for standing highest on the appropriate register, the order being determined by the relative rating, except that the names of persons preferred under section 1754, Revised Statutes, come before all others. Until the rating of all papers of an examination is completed the identity of no applicant is known. A vacancy may also be filled by promotion reduction, transfer, or reinstatement.

Veteran Preference.—Persons discharged from the military service by reason of disability resulting from wounds or sickness incurred in the line of duty who receive a rating of at least 65 are certified first for appointment. All others are required to obtain a rating of 70 or more to become eligible. The rule barring reinstatement after a separation of one year does not apply to any person honorably discharged after service in the Civil War or the war with Spain, or his widow, or an army nurse of either war.

Isthmian Canal Commission Employees.—The examination for employees of the Isthmian Canal Commission upon the Isthmus extend only to positions of clerk, bookkeeper, stenographer, typewriter, surgeon, physician, trained nurse, and draftsman.

Philippine Civil Service.—Appointments to the insular civil service of the Philippines are made under an act passed by the Philippine Commission and rules promulgated by the governor of the islands. The municipal service at Manila is also classified and subject to the provisions of the act and rules, which are similar to those of the United States. The United States Civil Service Commission, under an executive order, assists the Philippine Board by conducting examinations in the United States for the Philippine service and in all other practicable ways. These examinations are held only for positions for which competent natives can not be found, the natives being preferred for appointment.

The transfer is permissible, of classified employees who have served for three years, from the Philippine service to the federal service.

Civil Service in Porto Rico and Hawaii.—The federal positions in Porto Rico and Hawaii by act of Congress fall within the scope of the civil service act and are filled in the same ways as competitive positions in the United States. The competitive system does not extend to the insular and municipal positions of Hawaii, but such a system for Porto Rico has been approved, and went into effect January 1, 1908.

Unclassified Laborers.—Appointments of unclassified laborers in the Departments at Washington and in the large cities under executive order are required to be made in accordance with regulations restricting appointment to applicants who are rated highest in physical condition. The system is outside the civil service act and rules.

Demands for Eligibles with Certain Qualifications.—There is an increasing demand for male clerks qualified as stenographers and typewriters, veterinarians, patent examiners, draftsmen of the various kinds, and for civil, mechanical, and electrical engineers; superintendents of construction, computers, and aids in the Coast and Geodetic Survey; also for teachers, matrons, seamstresses, farmers, and physicians in the Indian Service, and for railway mail clerks in most of the Western and some of the Gulf States.

Persons who become eligible in any of the examinations for positions outside of Washington, D. C., which are not apportioned, usually have a good chance of appointment. The same is true of those who pass examinations for apportioned positions if they are legal residents of States or Territories which have received less than their full share of appointments.

A manual containing all information needful to applicants is furnished by the Civil Service Commission upon request.

THE LIBRARY OF CONGRESS.

History.—The Library of Congress was established in 1800, destroyed in 1814 by the burning of the Capitol, afterwards replenished by the purchase by Congress of the library of ex-President Jefferson, 6,760 volumes (cost, $23,950); in 1851, 35,000 volumes destroyed by fire; in 1852, partially replenished by an appropriation of $75,000; increased (1) by regular appropriations by Congress; (2) by deposits under the copyright law; (3) by gifts and exchanges; (4) by the exchanges of the Smithsonian Institution, the library of which (40,000

volumes) was, in 1866, deposited in the Library of Congress with the stipulation that future accessions should follow it. Sixty sets of Government publications are at the disposal of the Librarian of Congress for exchange, through the Smithsonian, with foreign governments, and this number may be increased up to 100. Other special accessions have been: The Peter Force collection (22,529 volumes, 37,000 pamphlets), purchased 1867, cost $100,000; the Counte de Rochambeau collection (manuscript), purchased 1883, cost $20,000; the Toner collection (24,484 volumes, numerous pamphlets), gift in 1882 of Dr. Joseph M. Toner.

Contributions.—Since the removal to the new building the Library has been enriched by a number of special collections. The Prints Division has received the Hubbard collection of engravings, gift in 1898 of Mrs. Gardiner G. Hubbard; and the Noyes collection of original drawings, prints, and books of Japanese artists, gift in 1905 of Mr. Crosby S. Noyes. The Prints Division also has the custody of the Garrett collection of 19,113 prints; and the George Lothrop Bradley collection of 1,980 engravings, etc., which, in accordance with his will, is to come into the permanent possession of the Library, subject to the life interest of Mrs. Bradley. The accessions to the Manuscripts Division give it superiority over any other like depository in this country. It now possesses the papers of nine Presidents, namely, Washington, Jefferson, Madison, Monroe, Jackson, Van Buren, Polk, Pierce, and Johnson. Of the papers of American statesmen and politicians there are those of Franklin, R. Morris, Hamilton, Van Buren, Duff, Green, Washburne, Clayton, Chase, Breckinridge, Crittenden, McArthur, Allen, Lyman, Trumbull; of naval officers, Preble, Perry, Porter, John Paul Jones; of state papers, the papers of the Continental Congress; and in Colonial documentary history, the records of the Virginia Company, Spanish papers from New Mexico and Florida; Philippine and Guam documents. The papers of Chancellor Kent represent the judiciary. In commercial history there are the Ellis papers, 1805-1853; Bourne papers, 1776-1816; Galloway papers (early part of eighteenth century), letters of William Taylor (the latter part of the eighteenth century); of John White, cashier of the Bank of the United States at Baltimore. Here also are the papers of William Thornton and George Watterson, illustrating the history of the District of Columbia. The Stevens Index of Mss. in European archives relating to America, 1763-1783, comprising 180 volumes, giving titles of 161,000 documents, and the Transcripts of 10,000 papers relating to the peace of 1783, in 37 large folio volumes, were bought in 1906. The Map Division has acquired the Kohl collection, the manuscript maps of Lord Howe, and many other manuscript maps, which make the collection extremely rich in original maps. The Weber library of Sanskrit literature (3,018 volumes, 1,002 pamphlets), and the Hattala library of Slavic literature (about 1,500 volumes) were bought in 1904.

In 1907 the Yudin collection of Russian works (80,000 volumes) and a Japanese collection (9,000 volumes) were added; and in 1908 the Huitfeldt-Kaas collection of Scandinavian literature containing about 5,000 volumes.

The collection is now the largest on the Western Hemisphere and the third in the world. It comprised at the end of the fiscal year (June 30, 1908) about 1,535,008 printed books and pamphlets (including the law library of 126,816 volumes, which, while a division of the Library of Congress, still remains at the Capitol), 105,118 maps and charts, 483,411 pieces of music, and 279,567 photographs, prints, engravings and lithographs. Of the printed books, probably one-sixth are duplicates not in use.

The Smithsonian deposit is strong in scientific works, and includes the largest assemblage of the transactions of learned societies which exists in this country.

The New Building.—In 1897 the main collection was removed from the Capitol to the building erected for it under the acts of Congress approved April 15, 1886, October 2, 1888, and March 2, 1889, at a cost of $6,347,000 (limit by law, $6,500,000) exclusive of the land which cost $585,000. The architects who furnished the original designs were John L. Smithmeyer and Paul J. Peltz. By the act of October 2, 1888, before the foundations were laid, Thomas L. Casey, Chief of Engineers of the Army, was placed in charge of the construction of the building, and the architectural details were worked out by Paul J. Pelz and Edward P. Casey. Upon the death of General Casey, in March, 1896, the entire charge of the construction devolved upon Bernard R. Green, General Casey's assistant, and under his superintendence the building was completed in February, 1897; opened to the public November, 1897. The building occupies three and three-quarter acres upon a site ten acres in extent at a distance of 1,270 feet east of the Capitol, and is the largest and most magnificent library building in the world. In the decorations some forty painters and sculptors are represented—all American citizens. The floor space is 326,195 square feet, or nearly 8 acres. The book stacks contain about 56 miles of shelving, affording space for 2,600,000 octavo volumes. Plans have been submitted to Congress for covering in one of the interior courts to provide for needed increase of book space.

Maintenance.—The Library is maintained by annual appropriations by Congress for various purposes, including the purchase of books. For the year 1908-9 these amounted to $719,365.74 (not including allotment for printing and binding, $202,000), as follows: $438,865.74 for services and contingent expenses (including the Copyright Office, and including also the care of the building); $100,000 toward a new book stack; $109,500 for books and periodicals; $32,500 for fuel, supplies, and miscellaneous purposes; $40,000 for furniture, shelving, etc.

Officials.—The Librarian of Congress and the Superintendent of the Library Building and Grounds are now appointed by the President of the United States, by and with the advice and consent of the Senate (act of 1897). The employees of the Library are appointed by the Librarian under the act of 1897, which provides that they shall be appointed "solely with reference to their fitness for their particular duties."

The President, Vice-President, Senators, Representatives, and Delegates in Congress are entitled by statute to draw books for home use (though no books can be given out on the orders of members in favor of those who are not members). The same privilege is extended by statute to Justices of the Supreme Court, the heads of the Executive Departments, and certain other officials.

Inter-Library Loans.—While not a lending library, but a reference library primarily and essentially, the Library of Congress maintains an inter-library loan system, by which special service is rendered to scholarship by the lending of books to other libraries for the use of investigators engaged in serious research which is not within the power or duty of the library in question to supply, and which, at the time, are not needed in Washington.

Library Service.—Library proper, 242 employees; Copyright Office, 70; distribution of catalogue cards, 15; law indexing, 9; disbursement service and care of building and grounds, 127. Total, 463.

Publications.—The publications issued by the Library are numerous and include:

Annual reports, showing the progress of the library.

Bibliographs, exhaustive statements of the literature of certain subjects, e. g., Philippine Islands.

Reference lists, containing principal references to questions of current interest, e. g., trusts, subsidies, railroads.

Catalogues, list of special collections in the Library of Congress, e. g., Washington MSS., John Paul Jones MSS., maps of America, newspapers.

Special publications on library methods, e. g., catalogue rules, classification, etc.

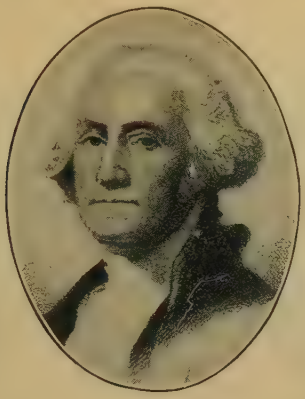
There is but a limited free distribution of publications. The reports and other administrative documents are sent to a large number of institutions, and, on request, to such inquirers as can not reach or be adequately served by them. Publications which are costly and permanent contributions to knowledge are priced and placed on sale with the superintendent of documents.

Copyright Office.—The Copyright Office is a distinct division of the Library of Congress and is located on the ground floor, south side; open 9 to 4.30. It is under the immediate charge of the Register of Copyrights, who, by the act of February 19, 1897, is authorized, "under the direction and supervision of the Librarian of Congress," to perform all the duties relating to copyrights. Copyright registration was transferred to the Librarian of Congress by the act of July 8, 1870. Of most articles copyrighted two copies, and of some one copy, must be deposited in the Library of Congress to perfect copyright. Books, maps, musical compositions, photographs, periodicals, and other articles deposited in the Copyright Office to complete copyright numbered, during the fiscal year 1907-8, 221,722 articles. Copyright fees applied and paid into the Treasury for the fiscal year 1907-8 amounted to $82,387.50.

Hours.—On week days (except legal holidays) the Library building, Main Reading Room, Periodical Reading Room, and Law Library are open from 9 a. m. to 10 p. m.; other parts of the Library, from 9 a. m. to 4.30 p. m. On Sundays and certain legal holidays the Building, Main Reading Room, periodical Reading Room, Division of Prints, and Music Division are open from 2 to 10 p. m., the Librarian's Office and the office of the Chief Clerk from 2 to 6 p. m.

Librarians Since the Inception of the Library.—1800-1814, the Clerk of the House of Representatives (for the time being); 1815-1829, George Watterston; 1829-1861, John S. Meehan; 1861-1864, John G. Stephenson; 1864-1897 (June 30), Ainsworth R. Spofford; 1897 (January 17, 1899), John Russell Young; 1899 (April 5), Herbert Putnam.

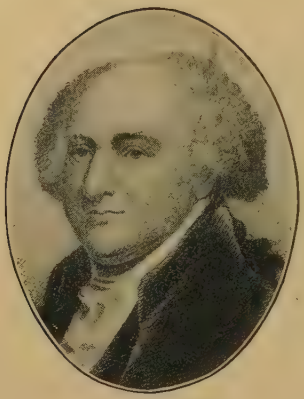
PRESIDENTS OF THE UNITED STATES.



GEORGE WASHINGTON.

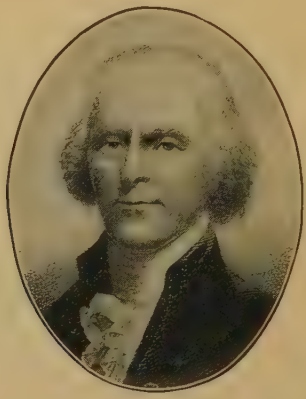
GEORGE WASHINGTON, first President of the United States: born in Westmoreland County, Virginia, 22nd of February, 1732; died at Mount Vernon, 14th of December, 1799. He was the son of Augustine Washington, a Virginia planter. He left school when about sixteen years of age; was engaged in surveying 1748-51; was appointed adjutant of Virginia troops in 1751; inherited Mount Vernon on the death of his brother in 1752; was made commander of a military district of Virginia in 1753; was sent on a mission to the French authorities beyond the Allegheny river, 1753-54; was appointed lieutenant-colonel in 1754; had a successful skirmish with the French and defended Fort Necessity, but was obliged to surrender on July 3, 1754; was a volunteer aide-de-camp to Braddock in 1755 in the battle of the Monongahela, and through his skill and knowledge of frontier warfare, saved the survivors of that disastrous engagement; commanded on the frontier, 1755-57; and led the advance guard in Forbes's expedition against Fort Duquesne in 1758. In January, 1759, he married Mrs. Martha Custis and settled as a planter at Mount Vernon. He was elected a delegate to the Virginia House of Burgesses, and to the Continental Congresses of 1774-75; became commander-in-chief of the Continental forces at Cambridge in July, 1775; and compelled the evacuation of Boston in March, 1776. His army was defeated in the battle of Long Island in August, 1776, and at White Plains in the October following. He retreated across New Jersey to Pennsylvania and crossing the Delaware surprised the Hessians at Trenton, December 26; won the victory of Princeton, January, 1777; was defeated at Brandywine and Germantown in 1777; wintered at Valley Forge, 1777-78; fought the drawn battle of Monmouth in 1778; compelled the surrender of Cornwallis at Yorktown in 1781; resigned his commission as commander-in-chief in 1783 and retired to Mount Vernon. In 1787 he was president of the Constitutional Convention; was unanimously elected President of the United States in February, 1789, and inaugurated at New York, April 30, 1789; was unanimously re-elected in 1793. His administrations were occupied with the establishment of the new government under the Constitution, and the regulation of finance and commerce. Among the important events were the admission of Vermont, Kentucky, and Tennessee, the Indian wars, the "whiskey insurrection," and the Jay treaty. In September, 1796, he issued his farewell address to the people. In 1798 he was appointed lieutenant-general of the army in anticipation of a war with France.

"It was always known by his friends, and it was soon acknowledged by the whole nation and by the English themselves, that in Washington America had found a leader who could be induced by no earthly motive to tell a falsehood, or to break an engagement, or to commit any dishonorable act. Men of this moral type are happily not rare, and we have all met them in our experience; but there is scarcely another instance in history of such a man's having reached and maintained the highest position in the convulsions of civil war and of a great popular agitation."—Lecky, England in the XVIIIth Century.



JOHN ADAMS.

JOHN ADAMS, second President of the United States: born at Braintree (Quincy), Massachusetts, 30th of October, 1735; died at Quincy, Massachusetts, 4th of July, 1826. The son of a small farmer, he was graduated from Harvard College in 1755, taught school, studied law, was active in opposing the Stamp Act, was counsel for the soldiers charged with murder in connection with the "Boston massacre" of 1770, and became a leader of the patriot party. In 1774 he was chosen a member of the Revolutionary congress of Massachusetts. He was a delegate to the first and second Continental Congresses. In the Continental Congress of 1775 he proposed Washington as commander-in-chief of the Continental forces. He was one of the committee of five which drew up and signed the Declaration of Independence. In 1777 he was appointed commissioner to France; negotiated a treaty with the Netherlands in 1782; was one of the negotiators of the treaties with Great Britain, 1782-83; negotiated a treaty with Prussia; and was appointed United States minister to England in 1785. He was Federal Vice-President, 1789-97 and was elected as Federal candidate for President in 1796. His administration was a stormy one owng partly to the treacherous course of the French Directory toward the United States minister, partly to dissension in his cabinet, and partly to the rivalry of Hamilton. The Alien and Sedition Acts added to his unpopularity but his lofty patriotism and sincerity have never been questioned. In 1800 he was again the Federal candidate for President but was defeated and retired to Quincy in 1801.

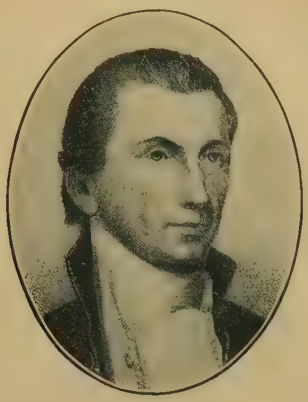


THOMAS JEFFERSON.

THOMAS JEFFERSON, third President of the United States: born at Shadwell, Albemarle County, Virginia, 2nd of April, 1743; died at Monticello, Albemarle County, Virginia, 4th of July, 1826. He was graduated from William and Mary College, studied law, and entered upon its practice. He was a member of the Virginia House of Burgesses, 1769-75 and became active in the Revolutionary agitation. He drafted the instructions to the Virginia delegates to the first Continental Congress. He was a delegate to the second Continental Congress of 1775-76 and drew up the Declaration of Independence. He was again in the House of Burgesses, 1776-78, and was governor of Virginia, 1779-81; was a member of Congress, 1783-84; United States minister to France, 1785-89, while there writing his "Notes on Virginia," and witnessing the outbreak of the French Revolution; and secretary of state, 1790-93. In the ensuing years he became the founder and central figure of the Democratic-Republican party which was formed in opposition to the Federalists. He was Vice-President, 1797-1801, and President two terms, 1801-09. His administrations were marked by the abolition of some usages of an aristocratic tendency, by the war with Tripoli, the Louisiana Purchase, the Lewis and Clark expedition for the exploration of the northwest, the "Chesapeake" incident, the reduction of the national debt, and the embargo. In his later life he was interested in educational work and superintended the founding of the University of Virginia. His political theories have exerted a powerful influence upon public life in America.

JAMES MADISON.

JAMES MADISON, fourth President of the United States: born at Port Conway, Virginia, 16th of March, 1751; died at Montpelier, Virginia, 28th of June, 1836. He was graduated from Princeton College in 1771 and for a few years thereafter pursued his studies in Hebrew, theology, philosophy, and law. In 1774 he was a member of the Committee of Public Safety for Orange County, Virginia; in 1776 was an influential delegate to the convention which framed the Constitution of Virginia; was a member of the first Virginia legislature; was a delegate to Congress from Virginia, 1780-83; and to the Constitutional Convention of 1787; and had much influence in framing and shaping the Constitution, while later the keen analysis and clear cut arguments, put forth in his writings and speeches, were potent factors in securing its adoption; was member of Congress from Virginia, 1797; drew up the Virginia Resolutions of 1798; was secretary of state, 1801-09; was elected President as Democratic candidate in 1808; and was re-elected in 1812. Madison was a man of peace and it was not until after many diplomatic attempts to bring about an understanding with England that he yielded to popular pressure and consented to the War of 1812. The greater part of his second administration was devoted to that conflict, and party strife became very bitter. The Peace of Ghent in 1814 left the country practically where it was before the war, "its boundary unchanged, its international rights still undefined." But Madison's services to the struggling young Republic place him in the first rank of her statesmen.

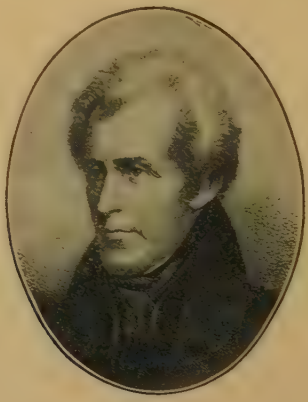


JAMES MONROE.

JAMES MONROE, fifth President of the United States: born in Westmoreland County, Virginia, 28th of April, 1758; died at New York, 4th of July, 1831. He was descended from Scotch cavalier stock. Having entered William and Mary College, he left his course unfinished to serve in the Revolutionary War. He was a member of the Virginia Assembly in 1782; was a member of Congress from Virginia, 1783-86; was a member of the Virginia ratification convention in 1788, where he earnestly opposed the centralizing features of the Constitution; was United States senator from Virginia, 1790-94; was United States minister to France, 1794-96; was governor of Virginia, 1799-1802; was one of the negotiators of the Louisiana Purchase in 1803; was United States minister to Great Britain, 1803-07; was again governor of Virginia in 1811; was secretary of state under Madison, 1811-17, and secretary of war, 1814-15; was elected President as the candidate of the Democratic-Republican party in 1816; and was re-elected in 1820. The period of his first administration is known as the "era of good feeling." His administrations were distinguished by the acquisition of Florida from Spain in 1819, the admission of the states of Mississippi, Illinois, Alabama, Maine, and Missouri. The discussion preceding the passage of the Missouri Compromise in that trial of strength between the slave and free states created bitter political strife. The promulgation of the Monroe Doctrine was more far-reaching in its effects than any other act of his useful, busy life and secured his title to fame. President Monroe's later years were passed away from his native state.

JOHN QUINCY ADAMS.

JOHN QUINCY ADAMS, sixth President of the United States: born at Braintree, Massachusetts, 11th of July, 1767; died at Washington, D. C., 23rd of February, 1848. He was the son of John Adams, second President of the United States. In his early life he was taken abroad by his father; studied at the University of Leyden, and at fourteen began his public career as secretary to Francis Dana, United States minister to Russia. He was graduated from Harvard in 1788; was admitted to the bar in 1791, and began to write on public affairs. He was minister to Holland, 1794-97; was minister to Prussia, 1797-1801; United States senator, 1803-08; was appointed minister to Russia in 1809; was one of the commissioners who negotiated the treaty of Ghent; was United States minister to England, 1815-17; and secretary of state to President Monroe, 1817-25. In the election of 1824 though he received but 84 electoral votes to 99 for Andrew Jackson, he was, by a coalition of his followers with the supporters of Clay, chosen President by the House of Representatives. Adams's administration was marked by intelligence, firmness, and integrity. It was, however, a stormy one owing to the bitter attacks of his enemies in Congress and to his own unbending and aggressive character. He favored protection, and internal improvements at Federal expense. He failed of re-election in 1828 but in 1831, at the age of sixty-four, he entered Congress as an independent member for the Quincy district in Massachusetts, which he represented till his death. He was an unsuccessful candidate for governor of Massachusetts in 1834.



ANDREW JACKSON.

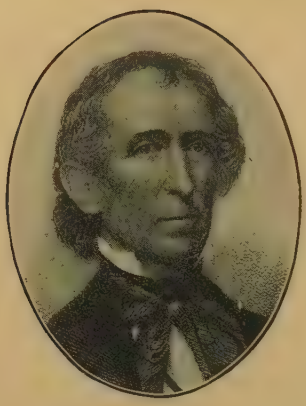
ANDREW JACKSON, seventh President of the United States: born at the Waxhaw settlement, North Carolina, 15th of March, 1767; died at the Hermitage, near Nashville, Tennessee, 8th of June, 1845. He began his military career at the age of thirteen at the battle of Hanging Rock. He was member of Congress from Tennessee, 1796-97; United States senator, 1797-98; justice of the Supreme Court of Tennessee, 1798-1804; defeated the Creeks at Talladega in 1813, and at Emuckfau, and Horseshoe Bend in 1814; captured Pensacola from the English in 1814; defeated the English at New Orleans in January, 1815; conducted a campaign against the Seminoles, 1817-18; was appointed governor of Florida Territory in 1821; was United States senator from Tennessee, 1823-25; was an unsuccessful candidate for President, in 1824; was elected as the Democratic candidate for President in 1828; and was re-elected in 1832. He instituted the "spoils system" in national politics by discharging nearly 700 office-holders during the first year of his administration as against seventy-four removals by all the preceding Presidents. In July, 1832, he vetoed a bill for renewing the charter of the Bank of the United States. On December, 11, 1832, he issued a proclamation in answer to the nullification ordinance passed by South Carolina, declaring void certain obnoxious duties on imports. In this proclamation he announced his determination to enforce the Federal laws, and following the proclamation he ordered United States troops to Charleston and Augusta, thus bringing about the submission of the nullifiers.

MARTIN VAN BUREN.

MARTIN VAN BUREN, eighth President of the United States: born at Kinderhook, New York, 5th of December, 1782; died at Kinderhook, 24th of July, 1862. He was eminent in his State both as a lawyer and as a Democratic politician; was an adroit party manager and often styled the "Little Magician." He was admitted to the bar in 1803; became surrogate of Columbia County in 1808; entered the New York State senate in 1812, and was re-elected to that body in 1816; was attorney-general of New York State, 1815-19; was United States senator from New York, 1821-28; was an influential member of the New York State constitutional convention in 1821; was governor of New York, 1828-29; was secretary of state under President Jackson, 1829-31; was sent as minister to Great Britain in 1831, but soon returned, owing to the rejection of his nomination by the United States Senate; was elected with Jackson for the latter's second term, serving as Vice-President, 1833-37; was elected as Democratic candidate for President in 1836 and served 1837-41. During his administration the country was troubled by the disastrous financial panic of 1837. Among the important features of his administration were the establishment of the independent treasury system, for which Mr. Van Buren deserved great credit, and the pre-emption law. Mr. Van Buren was again candidate for President in 1840 but was defeated by General William Henry Harrison. He was an unsuccessful candidate for the Democratic nomination for President in 1844; and the unsuccessful candidate of the Free-soil party for President in 1848.

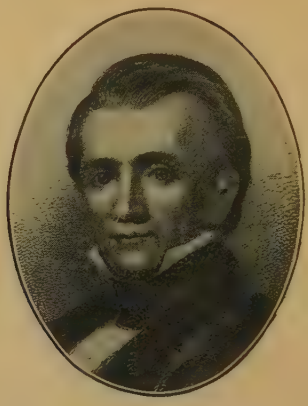
WILLIAM HENRY HARRISON.

WILLIAM HENRY HARRISON, ninth President of the United States: born at Berkeley, Charles City County, Virginia, 9th of February, 1773; died at Washington, D. C., 4th of April, 1842. He was the son of Benjamin Harrison, a signer of the Declaration of Independence; was educated at Hampden Sidney College; entered the army, and fought at Wayne's victory of 1794. In 1798 he became secretary of the Northwest Territory, and in 1799-1800 represented that Territory in Congress; was governor of the new Indiana Territory in 1800; was still governor when the Indian outbreak occurred, and his victory at Tippecanoe, November 7, 1811, gave him national prominence. In the war of 1812 he was major-general, first of Kentucky militia, and then in the regular army. He defended Fort Meigs against the British in 1813, and achieved his second military triumph by defeating Proctor and Tecumseh at the battle of the Thames. He was a member of Congress from Ohio, 1816-19; was United States senator, 1825-28; was made United States minister to Colombia, 1828-29; and was defeated by Van Buren as the Whig candidate for President in 1836. In December, 1839, the Whig party again put him forward as candidate for the presidency against Mr. Van Buren. The campaign of which the slogan was "Tippecanoe and Tyler, too," was one of enthusiastic demonstration for the "log cabin and hard cider" candidate and he succeeded president Van Buren on March 4, 1841. He held office but one month, falling a victim to the fatigue incident to the campaign and the clamor of office seekers.



JOHN TYLER.

JOHN TYLER, tenth President of the United States: born at Greenway, Charles City County, Virginia, 29th of March, 1790; died at Richmond, Virginia, 18th of June, 1862. He was educated at William and Mary College; was admitted to the bar in 1809; was member of the Virginia legislature, 1811-16: volunteered for the defense of Richmond in 1813; was member of Congress from Virginia, 1816-21; was a member of the legislature, 1823-25; was governor of Virginia, 1825-27; and was United States senator from Virginia, 1827-36. He opposed the tariff, the bank, and the Force Bill, and resigned in February, 1836, because of unwillingness to obey instructions of the Virginia legislature to vote for the "expunging resolution." He received 47 electoral votes in 1836 as candidate of the "States-rights Whigs" for Vice-President; was returned to the Virginia legislature in 1838; and was nominated by the Whigs as candidate for Vice-President in December, 1839. The death of President Harrison on April 4, 1841, one month after his inauguration, left Mr. Tyler President of the United States. His administration was marked by the quarrel with the leaders of the Whig party; the veto of the fiscal bank bills in 1841; veto of the protective bill in 1842; the Ashburton treaty; and the annexation of Texas. He was nominated for President by a Democratic convention in 1842, but subsequently withdrew. He was made peace commissioner by President Buchanan in 1861; was president of the peace convention in February, 1861; favored secession of Virginia; and was made a member of the Confederate provisional congress. His death occurred during the first year of the Civil War.



JAMES KNOX POLK.

JAMES KNOX POLK, eleventh President of the United States: born in Mecklenburg County, North Carolina, 2nd of November, 1795; died at Nashville, Tennessee, 15th of June, 1849. He was a graduate of the University of North Carolina and became a lawyer in Tennessee, having been admitted to the bar in 1820. He represented Tennessee as a Democratic member of Congress, 1825-39; was chairman of the Ways and Means committee; was speaker of the House of Representatives, 1835-39; was governor of Tennessee from 1839 to 1841; was defeated candidate for governor in 1841 and again in 1843. In 1844 the Democrats selected Mr. Polk as a "safe," compromise candidate for the presidency. The election was a close, hard struggle, with Mr. Clay, the great compromiser, as the Whig candidate. It ended in a victory for Mr. Polk, who had 175 electoral votes. He was inaugurated March 4, 1845, and his administration was one of great interest. The Mexican war, in which President Polk thoroughly believed, was vigorously prosecuted and its termination resulted in the acquisition by the United States of California and other Mexican territory. The boundary between Oregon and Canada, which had long been a subject of controversy between England and the United States, was peaceably settled by treaty in 1846. The revenue "Walker Tariff" received his approval, but he vetoed river and harbor bills in 1846 and 1847. As his term was nearing its end, gold was discovered in California and the movement of population to the westward greatly accelerated. Mr. Polk lived but a few months after his retirement from office.

ZACHARAY TAYLOR.

ZACHARY TAYLOR, twelfth President of the United States: born in Orange County, Virginia, 24th of September, 1784; died at Washington, D. C., 9th of July, 1850. He entered the United States army as first lieutenant in 1808; served in the War of 1812, attaining the rank of major; defended Fort Harrison against the Indians in 1812; served in Black Hawk's war in 1832, with the rank of colonel; won a victory over the Seminole Indians at Okechobee in 1837, and was brevetted brigadier-general; and became commander-in-chief in Florida in 1838. Later he commanded United States forces in the Southwest. When war with Mexico became imminent in 1845 Taylor was ordered to the disputed Texan frontier. He commanded in northern Mexico in the Mexican war; gained the battle of Palo Alto, May 8, 1846, and that of Resaca de la Palma the following day; took possession of Matamoras on May 18th; captured Monterey, September 24; and defeated Santa Ana at Buena Vista, February 22-23, 1847. He was appointed major-general June 29, 1846. The war over, Taylor became the national hero and in 1848 the Whigs nominated him as candidate for President over such competitors as Henry Clay and Daniel Webster. He was elected and entered upon his duties in 1849. The admission of California was complicated with the slavery question and the controversy attendant upon the settlement of these absorbing topics filled the brief period of his administration which was closed by his death sixteen months after his inauguration.

MILLARD FILLMORE.

MILLARD FILLMORE, thirteenth President of the United States: born at Summer Hill, Cayuga County, New York, 7th of January, 1800; died at Buffalo, New York, 8th of March, 1874. He was the son of Nathaniel Fillmore, a farmer of very modest fortune. While still a boy he learned the trade of a fuller; later he studied law; was admitted to the bar in 1823, and took up practice at Aurora, New York; was a member of the New York State House of Representatives, 1829-33, and drafted the bill abolishing imprisonment for debt; served as a representative of the Whig party from New York, in Congress, 1833-35, and, again, 1837-43; during the latter term was a member of the Ways and Means committee and drafted the tariff bill of 1842; was comptroller of the State of New York, 1847-49; was elected Vice-President on the Whig ticket headed by Zachary Taylor, in 1848; became President on the death of President Taylor, July 9, 1850, retiring from office March 4, 1853. During his administration the Compromise Acts of 1850 were passed with the cordial approval of President Fillmore. The expedition to Japan under Commodore Perry in 1853 was organized and executed. During his administration his political opponents were in control of both houses of Congress. Daniel Webster was his secretary of state. In 1856 Mr. Fillmore became the National American candidate for President of the United States but was defeated by Franklin Pierce, the Democratic candidate. He commanded a corps during the Civil war, and was the honored president of the Buffalo Historical Society.

FRANKLIN PIERCE.

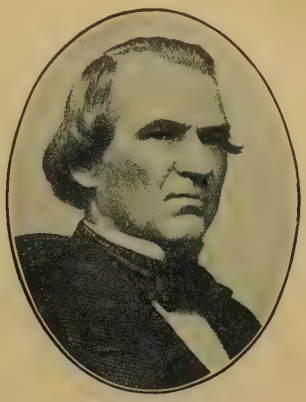
FRANKLIN PIERCE, fourteenth President of the United States: born at Hillsborough, New Hampshire, 23d of November, 1804; died at Concord, New Hampshire, 8th of October, 1869. He was the son of Benjamin Pierce; was graduated from Bowdoin College, where he was an associate of Hawthorne and Longfellow. After his graduation from Bowdoin he studied law and was admitted to the bar of his native state. While very young he was elected to the State Legislature and became speaker of that body. He was representative of the Democratic party of New Hampshire in Congress, 1833-37; was United States senator, 1839-42; was offered a cabinet position, which he declined; was a volunteer in the Mexican War, 1846-48; was distinguished for bravery, and was appointed brigadier-general; won credit in the battles of Contreas and Churubusco. His war record was a decisive factor in making him a presidential candidate. He was president of the New York State constitutional convention in 1850, and attained eminence in his profession. At the Democratic National convention of 1852, Pierce was nominated on the forty-ninth ballot, triumphing over such prominent competitors as Marcy, Cass, Buchanan, and Douglas. In the election he received 254 electoral votes. His administration was marked by the agitation of the Kansas-Nebraska question and the growth of the slavery controversy, by the Japan treaty, by the Nicaraguan affairs, the dissolution of the Whig party, and rise of the American and Republican parties. President Pierce was defeated for re-nomination in 1856.

JAMES BUCHANAN.

JAMES BUCHANAN, fifteenth President of the United States: born at Stony Batter, Franklin County, Pennsylvania, 22d of April, 1791; died at Lancaster, Pennsylvania, 1st of June, 1868. His father, an Irishman, settled on a farm at Stony Batter in 1783. James was educated at Dickinson College, Carlisle, from which institution he was graduated. He studied law and was admitted to the bar in 1812. In 1814 he was elected to the legislature of Pennsylvania, and to Congress in 1820, remaining a member of that body till 1831. President Jackson sent him as special ambassador to Russia to arrange a commercial treaty with that country. Returning to the United States in 1833 he was elected to the Senate. During the anti-slavery agitation Buchanan tried to keep it out of Congress by declaring that, constitutionally, it was a question which could be settled only by the individual states. Buchanan was secretary of state under President Polk. In 1853 President Pierce made him United States minister to England where he was distinguished by his dignified conduct of the affairs of his office. He returned to America in 1856 the chosen candidate of the Democratic party for the presidency. He was elected by a large majority over General Fremont, the Republican candidate. The questions of slavery and State-rights were the paramount issues of his administration. While claiming that the states had no right to secede, he denied the power of the Federal government to prevent their doing so. He became, however, a staunch supporter of President Lincoln and encouraged the prosecution of the war.

ABRAHAM LINCOLN.

ABRAHAM LINCOLN, sixteenth President of the United States: born in Hardin County, Kentucky, 12th of February, 1809; died at Washington, D. C., 15th of April, 1865. He was the son of Thomas Lincoln, descended from English Quaker stock. In 1816 the family moved from Kentucky to Indiana and in 1830 settled in Illinois. Soon after the latter change Lincoln began to work for himself and was engaged at different times as farm laborer, salesman, merchant, and surveyor. He was admitted to the bar in 1836 and began the practice of law at Springfield in 1837. He served in the Black Hawk war in 1832; was a Whig member of the Illinois State legislature, 1834-42; was Whig member of Congress from Illinois, 1847-49; was Republican candidate for United States senator in 1858 and was defeated by Stephen A. Douglas. In a series of debates with Mr. Douglas held throughout Illinois Mr. Lincoln took so pronounced a stand against slavery that he acquired national fame and became the Republican candidate for President in 1860. He was elected, and was inaugurated March 4, 1861. His election was followed by the secession, one after another, of the slave states of the South and by the organization of the Confederacy. War was begun by the Secessionists at Fort Sumter on April 12, 1861, and continued for four years. In September, 1862, President Lincoln issued a proclamation emancipating all slaves in states, or parts of states, which should be in rebellion on January 1, 1863. Mr Lincoln was re-elected in 1864. He was shot by John Wilkes Booth at Ford's Theatre, Washington, D. C., April 14, 1865.

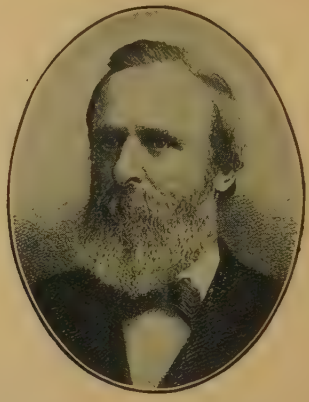


ANDREW JOHNSON.

ANDREW JOHNSON, seventeenth President of the United States: born at Raleigh, North Carolina, 29th of December, 1808; died in Carter County, Tennessee, 31st of July, 1875. He had no advantages of education, and was in early life a tailor. He was a man of tireless energy of character and after establishing himself in Tennessee he became a member of the State legislature; was a member of Congress from Tennessee, 1843-53; was governor of Tennessee, 1853-57; was United States senator 1857-62; was military governor of Tennessee 1862-64; was elected as Republican candidate for Vice-President with Lincoln in 1864; succeeded Lincoln as President on April 15th, 1865. His nomination to the vice-presidency was brought about by the Republicans as a means to conciliate the war Democrats. His unexpected accession to the presidency placed him in conflict with the party which had elected him because of his Democratic State-rights convictions. Congress was then heavily Republican, Mr. Johnson was a man of hasty temper and grim determination, and the quarrel which ensued between them was bitter. Matters culminated when Mr. Johnson attempted to remove Edwin M. Stanton from the secretaryship of war without the consent of the Senate, contrary to the tenure of office act passed over his veto, March 2, 1867. He was impeached for high crimes and misdemeanors, but was acquitted after a trial lasting from March 23 to May 26, 1868. The vote for acquittal stood 35 to 19, very nearly the two-thirds vote necessary to conviction. That Mr. Johnson was sincere and desired to serve his country's best interests cannot be doubted.

ULYSSES SIMPSON GRANT.

Ulysses Simpson Grant, eighteenth President of the United States: born at Point Pleasant, Clermont County, Ohio, 27th of April, 1822; died at Mount McGregor, New York, 23d of July, 1885. He was graduated from West Point in 1843; served through the Mexican War, 1846-48; left the army in 1854 and retired to private life, living in St. Louis and later in Galena, Illinois. On the outbreak of the Civil War in 1861 he was appointed colonel of volunteers and brigadier-general, August 7; captured Fort Donelson, February 16, 1862; was thereafter promoted to major-general of volunteers; was made commander of the District of West Tennessee; was made commander of the Department of Tennessee in October, 1862; received the surrender of Vicksburg, July 4, 1863, and was then made major-general in the regular army; was made commander of the Military Division of the Mississippi in October, 1863; was made lieutenant-general and commander of all the American armies in March, 1864; took up his headquarters with the Army of the Potomac in May, conducted the Wilderness campaign and commenced the siege of Petersburg in June; received the surrender of Lee at Appomattox, Virginia, April 9, 1865; was made general, July 25, 1866; was secretary of war ad interim, August, 1867—January, 1868; was elected President as Republican candidate in 1868, and re-elected in 1872; was an unsuccessful candidate for re-nomination in 1880. His administrations were marked by the passage of the Fifteenth Amendment, the inauguration of civil service reform, and the negotiation with Great Britain of the Treaty of Washington.



RUTHERFORD BIRCHARD HAYES.

Rutherford Birchard Hayes, nineteenth President of the United States: born at Delaware, Ohio, 4th of October, 1822; died at Fremont, Ohio, 17th of January, 1893. He was graduated from Kenyon College in 1842; studied law and settled in Fremont, Ohio. Later he was city solicitor in Cincinnati. On the outbreak of the war he volunteered, became major of Ohio infantry, served with distinction throughout the war, and, at its close retired as brevet major-general. He entered Congress in 1865, and, having been elected governor of Ohio, he occupied that position from 1868 to 1872. He was defeated for Congress in the election of 1872; and was elected governor on the "honest money" issue in 1875 after a campaign which attracted national attention. It was his success in this contest which caused his name to be presented to the Republican National convention of 1876. In the election which followed, his Democratic opponent was Samuel J. Tilden of New York. The election was contested and finally settled by an Electoral Commission appointed by an Act of Congress, January 29, 1877, to investigate charges of fraudulent returns of electoral votes from Florida, Louisiana, Oregon, and South Carolina. The commission was composed of three Republican senators, two Democratic senators, three Democratic representatives, two Republican representatives, and five associate justices of the Supreme Court. By the decision of this commission Mr. Hayes was declared elected. During his administration occurred the great railroad strikes of 1877, and the resumption of specie payments in 1879.

JAMES ABRAM GARFIELD.

JAMES ABRAM GARFIELD, twentieth President of the United States: born at Orange, Cuyahoga County, Ohio, 19th of November 1831; died at Elberon, New Jersey, 19th of September, 1881. He was a poor boy and after an early struggle with poverty, he entered Hiram College in Ohio. From there he went to Williams College and graduated in 1856. For a time he was an instructor in and later president of Hiram College, 1856-61, and a member of the Ohio Senate, 1859-61. In the opening year of the war he was appointed lieutenant-colonel of volunteers and entrusted with a small independent command. At Middle Creek, Kentucky, he won a victory on January 10, 1862. He was made a brigadier-general, served with distinction at Shiloh, and became chief of staff in Rosecrans' Army of the Cumberland, serving at Chickamauga, in 1863; was promoted major-general in 1863; had been already elected to Congress, and took his seat in December, 1863. From this time he served continuously until 1880, being one of the leading debaters and orators on the Republican side. He was a member of important committees, Military Affairs, Ways and Means, Banking and Currency, and Appropriations and of the Electoral Commission of 1877. He was elected United States senator for Ohio in 1880 and a few weeks later received the Republican nomination for President. His opponent on the Democratic ticket was General Hancock. General Garfield, entering office in March, 1881, became immediately involved in the Republican factional quarrels of New York. He was shot on July 2nd, 1881, by a fanatic, Guiteau, and died several weeks later.

CHESTER ALAN ARTHUR.

CHESTER ALAN ARTHUR, twenty-first President of the United States: born at Fairfield, Vermont, 5th of October, 1830; died at New York, 18th of November, 1886. He was graduated from Union College in 1848, and taught school for some years. He then studied law, was admitted to the bar, and practised in New York City where he attracted attention as a champion of the rights of colored people in that city. He was appointed a member of the staff of governor Morgan of New York in 1861. During the war he served with distinction as engineer-in-chief, acting quarter-master-general, and inspector-general. He was a prominent participator in New York politics and was appointed Collector of the Port of New York in 1871, from which position he was removed by President Hayes in 1878. After the prolonged and bitter contest for the Republican nomination which ended in the choice of Garfield as candidate for the presidency, Mr. Arthur was selected for the second place on the ticket as a representative of the Stalwart faction. Becoming Vice-President in March, 1881, he was suddenly called to the first position by the assassination of Garfield, and took the oath of office on September 20, 1881. His administration, opened rather inasupiciously because of the prejudices formed by reason of his active interference in New York politics during his term as Vice-President, proved dignified and conservative and won him the respect of all classes. He gave his influence to the strengthening of naval defences, vetoed a Chinese immigration bill and a suspiciously large river and harbor bill. He was an unsuccessful candidate for re-nomination in 1884.

GROVER CLEVELAND.

GROVER CLEVELAND, twenty-second and twenty-fourth President of the United States: born at Caldwell, New Jersey, March 18th, 1837; died June 24th, 1908. The son of a clergyman, Mr. Cleveland received a fair education, studied law, and entered upon its practice at Buffalo, New York, in 1859. He was assistant district attorney of Erie County, 1863-66; was defeated for district attorney in 1865; and was sheriff of Erie County, 1871-74. A reform movement made him Mayor of Buffalo in 1881 and his efficient administration made such a favorable impression that in the summer of 1882 he received the Democratic nomination for governor of New York. Republican disaffection contributed to his election by a majority of 192,000. His administration, following such an unprecedented victory, was such as to give satisfaction to all who desired honest government and in 1884 he received the Democratic nomination for President and was elected over James G. Blaine, the Republican candidate. His administration was marked by his support of civil service reform, of hard money, and especially of tariff reform, which he advocated in a message to Congress in December, 1887. He was again the candidate of his party in 1888 but was defeated. He retired from office, resumed the practice of law, and settled in New York City. In 1892 he was the third time nominated by the Democrats and was elected over Benjamin Harrison, his opponent in the contest of 1888. In 1893 President Cleveland convened an extra session of Congress, which repealed the purchasing clause of the so-called Sherman Silver Bill.

BENJAMIN HARRISON.

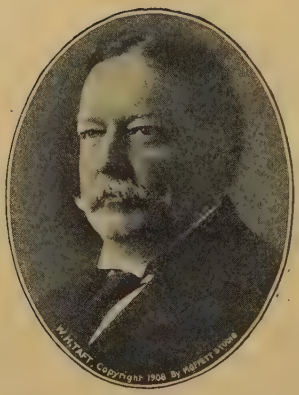
BENJAMIN HARRISON, twenty-third President of the United States: born at North Bend, Ohio, 20th of August, 1833; died at Indianapolis, Indiana, 13th of March, 1901. He was the grandson of William Henry Harrison, ninth President of the United States. He was graduated from Miami University in 1852; studied law, and settled in Indianapolis to practice his profession He was elected (Republican) reporter of the Indiana Supreme Court in 1860. Soon after the outbreak of hostilities between North and South he volunteered and became colonel of an Indiana regiment. In the battles of Resaca, and Peach Tree Creek, in 1864, he won distinction for bravery and left the army with the brevet of brigadier-general. He then resumed his position of Supreme Court reporter and was later known as an effective campaign orator and successful lawyer. In 1876 he received the Republican nomination for governor of Indiana but was defeated by a small majority. His name was presented to the Republican national convention of 1880. He was elected to the United States Senate and served from 1881-87. At the Republican national convention of 1888 he received the nomination, and was elected over President Cleveland in a campaign in which protection was the principal issue. His administration was marked by the McKinley Tariff Act in 1890, with the attendant feature of reciprocity, and by the meeting of the first Pan-American Congress. In 1892 Mr. Harrison was again the Republican nominee for the presidency but in the election he was again confronted with Mr. Cleveland as the Democratic candidate and was defeated.

WILLIAM McKINLEY.

WILLIAM McKINLEY, twenty-fifth President of the United States: born at Niles, Trumbull County, Ohio, 29th of January, 1844; died at Buffalo, New York, 14th of September, 1901. He was educated at Union Seminary, Poland, Ohio, and at Allegheny College, Meadville, Pa. He was forced by ill health to abandon his studies before completing his college course. For a time he was a school teacher and then clerk in the Poland post office. At the outbreak of the Civil War he enlisted as a private soldier and served with distinction throughout the war, and when mustered out in July, 1865, was acting assistant adjutant-general. At the close of the war he studied law at Youngstown, Ohio, and Albany, New York, and settled for practice in Canton, Ohio. He was prosecuting attorney of Stark County, 1870-71; was Republican member of the 45th, 46th, 47th, 49th, 50th, and 51st Congresses; was defeated for the 52nd Congress. As Congressman he became a figure of national prominence and served on many important committees. As chairman of the Ways and Means committee he introduced and supported the tariff bill of 1890 which bore his name. He served two terms as governor of Ohio, 1892-96. He was nominated and elected President by the Republican party in 1896, and re-elected in 1900. On September 6, 1901, he was shot at Buffalo by Leon Czolgosz, an anarchist, and died on September 14. The Spanish-American war, the annexation of the Hawaiian Islands, and the establishment of civil government in the Philippine Islands were among the important events of his administration.

THEODORE ROOSEVELT.

THEODORE ROOSEVELT, twenty-sixth President of the United States: born at New York City, 27th of October, 1858. He was educated privately and at Harvard from which institution he was graduated in 1880. He then traveled for a year in Europe and in 1881 published his first book, "The Naval War of 1812." He entered politics as a champion of civil service reform; was elected to the State Assembly of New York in 1881; was chairman of the New York delegation to the Republican national convention of 1884; was independent candidate for the mayoralty of New York, in 1886, but was defeated; was appointed a member of the United States Civil Service Commission and served from 1886 to 1895; was influential in advancing the number of employees on that list from 14,000 to 40,000; was president of the board of New York police commissioners, 1896; was assistant-secretary of the navy, 1897-98; was lieutenant-colonel of the United States volunteer cavalry regiment, known as "Roosevelt's Rough Riders;" bore a conspicuous part in the Cuban campaign and was promoted colonel; was elected governor of New York, 1898; was Republican candidate for Vice-President and was elected 1900. On the death of President McKinley he became President, September 14, 1901; and he was elected in 1904 by the largest popular majority ever given a candidate. The most important events of his two administrations have been the establishment of self government in Cuba, recognition of the independence of Panama, the beginning of the Panama Canal, the passage of the Reclamation Act, and establishment of a provisional government in Cuba.



WILLIAM HOWARD TAFT.

WILLIAM HOWARD TAFT, twenty-seventh President of the United States: born in Cincinnati, Ohio, 15th of September, 1857. The son of an eminent jurist and statesman; was graduated from Yale in 1878; received the following honorary degrees: LL. B. from the Law School of Cincinnati University in 1880; LL. D. from the University of Pennsylvania in 1902, from Yale in 1903, from Harvard in 1905, and from Miami in 1905. He held various federal, state, and academic positions during the years from 1881-1900, when he was made chairman of the U. S. Philippine Commission and served as the first civil governor of the Philippine Islands in 1901-1903. In the above office he established civil government in all the provinces; a public school system; a judiciary system; a health department and postal and civil service systems. In February, 1904, he entered President Roosevelt's cabinet as Secretary of War and served until July, 1908, when he became the nominee of the Republican party for President, and was elected in the November following. The first important event of his administration was the passage of the Payne-Aldrich Tariff Bill which finally received his support. That measure failed to carry out the party pledges for tariff revision downwards and roused great hostility in Congress and with the general public. As a further tariff measure, President Taft presented and secured the passage of the Canadian Reciprocity Bill. Mr. Taft failed to receive the support of the progressive element in his party and, while re-nominated by the Republicans in 1912, was defeated in the election following.

WOODROW WILSON.

WOODROW WILSON, twenty-eighth President of the United States: born at Staunton, Virginia, 28th of December, 1856. The son of a clergyman, Mr. Wilson is of Scotch-Irish ancestry; both his maternal and his paternal grandparents were foreign-born and came to this country in the nineteenth century. At about seventeen years of age he went to Davidson College, in North Carolina; two years later he entered Princeton, becoming a member of the class of '79; studied law at the University of Virginia in 1879-1880; practiced law in Atlanta in 1882-1883 and began there the historical and political writings which first brought him into fame. He studied political science at Johns Hopkins and in 1886 received the degree of Ph. D. from that institution. He was associate professor of history and political economy at Bryn Mawr in 1885-1888 and at Wesleyan University in 1888-1890; professor of jurisprudence and political economy at Princeton in 1890-1895, of jurisprudence in 1895-1897, and subsequently of jurisprudence and politics; and in 1902 he became president of Princeton University, being the first layman to hold that office. In 1910 he was elected Democratic governor of New Jersey. Prominent among the many important statutes enacted under his administration as governor, the Primary Law and the Workmen's Compensation Law may be taken as types of the political and social measures which he has urged. In July, 1912, he received the Democratic nomination for the presidency and was elected in the following November.

THE PANAMA CANAL

A HISTORY AND DESCRIPTION

I. THE REPUBLIC OF PANAMA.

History.—It is probable that the Isthmus of Panama was visited by Alonso de Ojeda in 1499. In 1501 Rodrigo Bastidas skirted the coast from the Gulf of Venezuela to the present Porto Bello. In the following year, 1502, Columbus, on his fourth and last voyage, coasted from Almirante Bay, near the present Costa Rica boundary, to Porto Bello Bay, discovering the "River of Crocodiles," now known as the Chagres River, and founding the short-lived settlement of Nombre de Dios. In 1509 the region which included the present states of Nicaragua, Costa Rica, and Panama, was organized by Spain as the province of Castilla del Oro. In 1513, Vasco Nuñez de Balboa, at that time governor of the province, with a few Indians and Spaniards, cutting his way through the wilderness, crossed the Isthmus and on the 25th of September of that year discovered the Pacific Ocean and named it the South Sea. Balboa was shortly after succeeded in command by Pedro Arias de Avila. In 1510 Martin Fernandez de Encisco, following Ojeda to the New World, had moved the survivors of Ojeda's colony of Nueva Andalucia (near the present Cartagena) to the Tuira River, and founded there the colony of Santa Maria la Antigua del Darien (commonly called Darien). In 1514 Pedro Arias joined this colony to the province of Castilla del Oro and gave to the united colonies the name of Tierra Firma. In 1519 the old city of Panama was founded, the first permanent European settlement on the mainland of the American continent.

The story of the Spanish conquest and settlement of Panama abounds in records of romantic adventure, intrigue, avarice, cruelty, and wastefulness. Lust for gold was joined to the spirit of religious fanaticism. Treasure began flowing into Spanish coffers, but ugly stories of the way in which it was obtained, of persecution, of torture, and of slavery, floated across the sea with the treasure ships. Those stories persisted and the Protestant countries of Europe began to take note. Those were the days of the great English privateersmen—Drake, Parker, Morgan, and many others. Soon the Spanish colonists began to realize that they must suffer for the wrongs they had meted out to others. Protestant Englishmen were not any more merciful than Roman Catholic Spaniards had been. They captured the treasure ships, harried the settlements, and spared not the innocent while punishing the guilty. It remained for Henry Morgan, the able but unscrupulous Welshman, to carry on and eclipse the work of retribution begun by Drake. From 1668 to 1670 he ravaged the settlements from Cartagena to Chagres, and in 1671 he finally captured and destroyed the old city of Panama whose ruins are eagerly sought by the tourists of to-day.

In 1698 a Scotch settlement, under the authority of the Scotch Parliament, was made by William Patterson on the site of the present Porto Escoces in Darien, but in 1700 the Spanish authorities expelled the few colonists remaining there.

Panama was a part of the viceroyalty of New Granada, created in 1719, and it remained a Spanish possession until 1819 when it threw off its Spanish allegiance and became a part of the independent nation of Colombia. In 1831 it joined the Granadine Confederation from which it twice seceded, in 1841 and again in 1857, but in each instance returned to its former allegiance after a brief independence. The completion of the Panama Railway in 1855 led to increased trade and to a more complete knowledge of that part of the Isthmus and its people. Panama had a more or less troubled career from 1885 until November 4, 1903, when it again became an independent state under circumstances which promise well for its permanence and future prosperity. A few weeks after its independence the new Republic made a treaty with the United States of America, which treaty gave this country the right to build the Panama Canal, together with a perpetual leasehold of a strip of territory ten miles

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wide across the Isthmus from ocean to ocean. This territory is known as the Canal Zone and, while it divides the domain of Panama into two parts, the arrangement is such that the rights and interests of her people are fully protected. (See History of the Panama Canal).

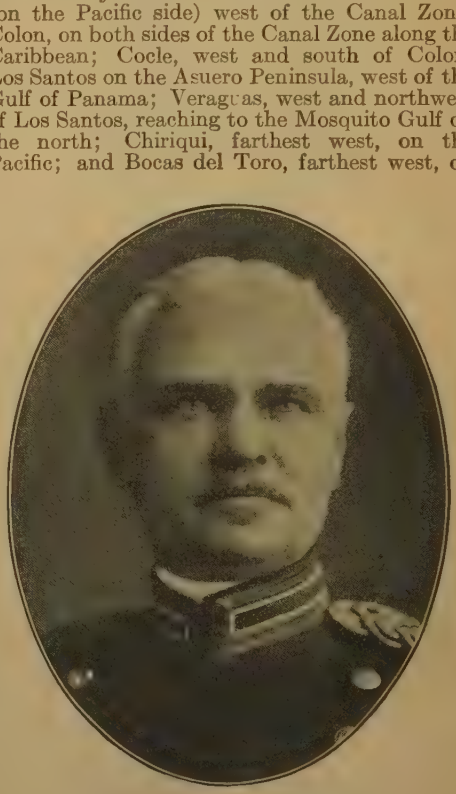
On January 4, 1904, two months after the declaration of independence, a constitutional assembly was elected. This legislative assembly met on the 15th of January and on the 13th of February of the same year adopted a constitution, and chose a president

The financial condition of Panama is strong. It has no bonded debt upon which to pay interest and it is the only nation of the world collecting interest on its own money instead of paying out interest on loans. It has no army, no navy, and its leading cities are kept clean by the United States.

The Republic of Panama is bound to live and prosper. Peace within her borders is assured by the protection of the United States. The introduction of new racial elements and of modern methods in developing her natural resources can have no other result than an intellectual awakening of her own people and a strengthening of the spirit of national loyalty and patriotism.

Government.—By the constitution, adopted February 13, 1904, the government is a highly centralized republic, with legislative, executive, and judicial departments. All male citizens of twenty-one years of age and over have the right to vote, unless under judicial interdiction or inhabilitated because of crime. The president, who must be at least thirty-five years old, is elected by popular vote for a term of four years and is ineligible to succeed himself. He appoints his cabinet members (secretaries of foreign affairs, government and justice, treasury, interior and public instruction); five supreme court judges; diplomatic representatives; and the governors of the provinces, who are responsible only to him. Three officials, known as designados, elected every two years by the National Assembly are in the line of presidential succession in case of the death or disability of the chief executive. The National Assembly is a single chamber, whose deputies (each at least twenty-five years of age) are elected for terms of four years by popular vote on the basis of one to every 10,000 inhabitants, or fraction over 5,000. The Assembly meets biennially and by a two-thirds vote it may pass any bill over the president's veto. The president has five or ten days, according to the length of the bill, in which to veto legislative acts. At the head of the judiciary is the Supreme Court, the members of which appoint the judges of the superior court and the circuit courts as well as the justices of the municipal courts.

The Republic is divided into seven provinces, their boundaries representing those of old administrative districts: Panama, with most of the territory east of the Canal Zone and a little (on the Pacific side) west of the Canal Zone; Colon, on both sides of the Canal Zone along the Caribbean; Cocle, west and south of Colon; Los Santos on the Asuero Peninsula, west of the Gulf of Panama; Veraguas, west and northwest of Los Santos, reaching to the Mosquito Gulf on the north; Chiriqui, farthest west, on the Pacific; and Bocas del Toro, farthest west, on



COL. GEORGE W. GOETHALS
Governor of the Canal Zone

the Caribbean. *Towns.* Panama, the capital and largest town, has 37,505 inhabitants; Colon, the chief Atlantic port and the second city in point of numbers, has a population of 17,749. The United States controls the sanitation of these towns but does not interfere in any other way with their administration. David, the capital of Chiriqui province is the most progressive of the provincial towns. Smaller ports are Bocas del Toro and Porto Bello on the Atlantic, and Agua-Dulce and Montijo on the Pacific.

Inhabitants.—Few of the native inhabitants of Panama are of pure Spanish blood. The great

majority belong to a mixed race comprising Spanish, Indian, and Negro elements. The foreign population is small and includes immigrants from the United States and European countries. Not a few of those who have helped to build the Canal will become citizens of Panama and go in for ranching—agriculture of various kinds—or take advantage of the positions awaiting workers in the mining and forestry industries, now being developed for the first time. The government maintains a system of public schools throughout the provinces, and a university, the Instituto Nacional, has been established in the city of Panama. In addition to the foregoing there are several private educational institutions, and a number of young people, of both sexes, are being educated in the United States and Europe at the expense of the government.

PHYSICAL FEATURES.—*Area, boundaries, and coast-line.* The narrow, sinuous strip of land, running east and west, which joins the continents of North and South America, is occupied by the Republic of Panama and comprises an area of 32,380 square miles. Its extreme length from east to west is 430 miles, and its greatest width from north to south 118 miles. The points where the isthmus is narrowest are at the Gulf of San Blas (31 m.), the Colon-Panama route (40 m.), and between the gulfs of Darien and San Miguel (46 m.).

The country is bounded on the north by the Caribbean Sea, on the east by Colombia, on the south by the Pacific Ocean, and on the west by Costa Rica. With land frontiers aggregating only 350 m. in length, the little republic boasts a coast line of 1,245 m., of which 478 m. are on the northern or Caribbean side, while 767 m. face the Pacific. Along both the northern and southern shores are many inlets affording good anchorage for vessels engaged in coasting trade.

The main indentations of the northern coast are the Gulf of Darien on the northeast and the Mosquito Gulf on the northwest, while between these, from east to west, there are Caledonia Bay or Harbor; the Gulf of San Blas, 20 m. long and 10 m. wide, with an excellent harbor at Mandinga; Limon Bay, which furnishes the northern approach to the Canal; Chiriqui Bay, with an area of 320 sq. m. and a maximum depth of 120 ft.; and farther west near the Costa Rican boundary is Almirante Bay. Along the north shore there are some 600 islets with a total area of about 150 sq. m. The Pacific side of the isthmus is deeply indented by the Gulf of Panama, more than 100 miles in width between Pt. Garachine on the east and Cape Malo on the west. The chief harbors of this great southern indentation are the Gulf of San Miguel on the east, and the Bay of Parita on the west. Darien Harbor, formed by the Tuira and Savannah rivers and nearly landlocked, is a part of the Gulf of San Miguel. West of the Asuero Peninsula is Montijo Bay, 20 m. long and 14 m. wide at its mouth. In the Gulf of Panama there are more than 100 islands, most of them very small, with a total area of about 400 sq. miles. The Pearl Islands, named for the pearl-fisheries which are their most valuable resource, are about 60 m. southeast of Panama City. To the west of the Asuero Peninsula are Cebaco and Coiba Islands, the latter, 21 m. long and 4 to 12 m. wide, being the largest island of the Republic.

SURFACE.—Panama is a broken and rugged country, its highlands being either a part of the complex cordillera which runs from Alaska to the Straits of Majellan, or a part of the Antillean system, to which belong the mountains of the West Indies. The former classification is the one generally accepted by those who write of the Panama Canal. Every American child has been taught in school that the cordillera forms the backbone of the American continent. There is something awe-inspiring in the thought of this majestic mountain barrier, with it countless ramifications, offshoots, and lofty summits, stretching through every zone of climate, from Arctic to Antarctic regions, which is so conveniently depressed or weakened in the narrowest part of the continent as to make possible the piercing of the divide and the building of a waterway from ocean to ocean.

The only regular mountain ranges in Panama are in the extreme western part where the Costa Rica divide crosses the boundary and enters its territory. Immediately south of this and parallel to it is the Cordillera of San Blas or the Sierra de Chiriqui, in which range Mt. Chiriqui reaches an altitude of 11,265 feet, while Mt. Blanco, on the Costa Rica frontier, attains an elevation of over 11,700 feet. On the far eastern boundary of the republic is the Serraina del Darien, an Andean range which Panama shares with her Colombian neighbor. Between these highlands of the west and east are many short sierras, groups, and spurs. It should be noted that the ranges lie at right angles to the mountain systems of North and South America, that the summits are "exceedingly irregularly rounded, low-pointed, and densely forested." These characteristics are Antillean, not Andean.

The highest summit, aside from those near the western border and already noted, is Mt. Santiago in the province of Veraguas, which attains an elevation of over 9,000 feet. The Sierra de Panama, in Panama province, is a much-broken range with a maximum height of 1,700 ft. and a minimum, at the Culebra Pass, of about 300 ft., the lowest point in the western continental system, except the interoceanic

water-parting in Nicaragua, which is only 153 ft. above sea level. In considering the construction of the canal at Panama it was the low elevation at Culebra which decided the engineers in favor of the Colon-Panama route instead of the narrower but more elevated San Blas route.

Between the hills and mountains of Panama are richly wooded valleys and occasional stretches of grassy llano. There are a few plains like that of David in Chiriqui province but an irregular surface, the result of heavy rains and marine erosion, is the prevailing characteristic of the country.

Drainage.—There are no lakes in Panama, except the artificial ones in the Canal Zone. A few swampy areas are found along the coasts, but aside from these spots the drainage of the country is excellent. About 150 streams flow to the Caribbean and more than double that number to the Pacific. East of the Canal Zone are three complicated river systems, of which the largest is the Tuira or Rio Darien, rising near the Caribbean, whose waters reach the Pacific through the Gulf of San Miguel. The Chepo or Bayano is another digitate system with a wide-reaching drainage basin, which enters the Gulf of Panama about 30 m. east of the city of Panama; it is navigable by small boats for a distance of 120 miles.

The Chagres River, now known to all who have followed the building of the Canal, has its origin in the wilderness of southeastern Panama, near the Pacific Ocean. With its numerous tributaries it drains an area of 1,320 square miles. In the dry season of the year the Chagres was a comparatively placid stream which wound among the hills, first southwest and then north to the Caribbean. It was navigable by small boats for nearly half of its course, about fifty miles. When the rainy season began the Chagres assumed another character. It has been known to rise 35 ft. in 24 hours, overflowing its banks, and destroying all that came in its way. The story of the capture of this river and its utilization in making the Canal forms an interesting part of the history of that achievement. To-day it spreads out into Gatun Lake, from which great reservoir its water flows through the canal channel to both the Atlantic and the Pacific oceans. West of the Canal Zone there are many smaller rivers, rising near the center of the Isthmus and flowing either north or south. Little use is now made of these streams but their banks are heavily wooded, and they are destined to play an important part in the future development of the country.

Photo by Wheeler

A Street View in Panama, showing residence of President of the Republic on right

Climate.—Panama is not far from the equator but it lies between two great oceans whose proximity to all parts of the interior tends to temper the heat. A record of 100° F. is unknown, and the mean temperature varies but little throughout the republic. At Colon, where 68° is a low and 95° a high temperature, the mean is 80°; at Panama the mean is 80.6°. The Caribbean coast, however, is normally a little warmer than the Pacific coast. Moisture loads the air and so great is the humidity in the Zone that it seems much warmer than the thermometer

indicates. In the highland regions in Chiriqui and in some of the other provinces the atmosphere is drier and less enervating. There is a wet and a dry season; in the former, which lasts from April to December, southeast winds prevail and the rainfall equals about 85 per cent. of the total annual precipitation. It comes in the form of short but very heavy rains, which cause the streams to rise suddenly and destructively. In the dry season, from January to March, the northeast wind prevails and the climate becomes more bracing. The rainfall on the north coast varies from 85 to 155 in., with 125 in. as the mean; on the south coast it varies from 47 to 90 in., with 67 in. as the mean.

Resources and Industries.—Two-thirds of the area of Panama is occupied with forests of valuable wood. The Atlantic side of the water-parting and the Darien region are the most densely covered portions of the country. The jungle on the Atlantic slope is so nearly impenetrable that enormous capital will be required to clear the land, a condition which has greatly retarded the development of the lumber industry. On the Pacific side, where the rainfall and humidity are less, the forest is more open and the timber growth smaller. Here are large districts suitable for fruit culture, wheat growing, and cattle raising.

There is no doubt about the richness and fertility of Panama. Part of the province of Chiriqui is splendid farming country, producing wild grasses that are nutritious as well as luxuriant. There are many localities which are suitable for bananas; others that seem to be specially adapted for tobacco culture, and others where coco-nut plantations would thrive. Sugar-cane, coffee, corn, and vegetables and fruits are profitably grown. A soil which gives crops with little work is not an unmixed blessing, for it ministers to the sloth of the natives and prevents the development of the country. Only the most haphazard methods have hitherto been practiced in cultivating the soil, which as a rule is simply scratched with a machete, the seed dropped, and the crop left to care for itself. The present population is sparse, the roads and tracks poor, the settlements scattered, and the majority of the people are lacking in energy and interest.

Wild rubber trees are found throughout the country and the scientific gathering of rubber and the planting of new areas, which have been started by foreign companies, will lead to an important rubber industry.

Cattle raising is the only branch of agriculture which has been conducted with care and intelligence by the natives, and the results have been very gratifying. The industry is bound to grow and there is every probability that in a few years Panama will become a potent factor in the world's cattle markets.

The mineral resources of the country are as yet almost unknown and wholly undeveloped, but they include gold and other metals, and will prove a source of wealth to those who may have capital to develop them.

There is a tradition that the name Panama is an old Indian term meaning "place of abundant fish;" the tradition seems justified, for the waters of the Pacific Ocean at the Isthmus teem with excellent fish, and the oyster and pearl-oyster fisheries have long been known. The pearls from Panama Bay were one of the valued assets of the early Spanish colony.

An English writer, who recently visited the Isthmus, has said that "nothing is manufactured in Panama save revolutions." That may have been true in by-gone days, but there are indications that the Republic has begun to improve and extend the industrial activities of the country in a way which promises benefit to the people. The real prosperity of the country must come from the development of its agricultural resources, but the commercial world has turned its attention to Panama and finds it worth the consideration of those who have money to invest in enterprises calling for large capital.

Commerce.—With the exception of fresh meat, fruit, and vegetables, practically everything to be purchased in Panama is imported. The import trade of the Republic has steadily increased since the new government came into existence and, while the exports are still less than one-third the value of the imports, a steady advance is being made towards an equalization of trade. A progressive trade is carried on in bananas and it will not be long before the cacao, sugar, coffee, and rubber produced in the country will add to the number and variety of exports.

The Isthmus is in direct communication with American and European ports by several lines of steamers. The Panama Railroad in the Canal Zone is owned and controlled by the United States. In the province of Bocas del Toro the United Fruit Company owns about 140 miles of narrow gauge track which is used to transport bananas and passengers to the port of Almirante in Chiriqui Bay. This line extends into Costa Rica and is being extended. A national line, 271 miles in length, from Panama City to David, in the province of Chiriqui, has been surveyed and, when built, will hasten the development of the region through which it passes. There are telegraph cables from Panama to North and South American ports, and from Colon to the United States and Europe. The roads throughout the country are being improved and extended.

II. VARIOUS PROJECTS FOR AN ISTHMIAN CANAL

Early History.—Columbus sought a western route from Europe to Asia, to the wonder-lands portrayed by Marco Polo and other travelers in the East. He died believing that he had achieved that result and it was not until long years afterward that the original object of westward exploration was abandoned. Even when the fact had been established that a new continent of enormous extent lay between Europe and Asia, the search for a passage between the oceans continued, and some of the early maps of America show an imaginary "Strait of Panama."

When Balboa crossed the Isthmus he grasped the possibility and significance of an artificial waterway which should join the two oceans. With the report of his discovery to Spain there went also a recommendation that a canal be immediately dug across the Isthmus. While the suggestion attracted attention and even carried conviction to a few minds, Spain was not yet ready for so daring a venture. But the vision which Balboa beheld from that lonely height in the tropical wilderness was not to fade. It continued to haunt the minds of men for four hundred years, and then it became a reality.

The discovery and conquest of Peru made a highway of some sort across the Isthmus imperative, and a pathway from ocean to ocean was cut through the jungle, which was kept open and in use for nearly 400 years. Over it was soon passing in ever increasing volume the treasure brought in vessels from Peru to Panama and transported thence by mule trains to the Atlantic port in Limon Bay. There waiting galleons received it and bore it across the Atlantic to Spain. The Pacific port became the old city of Panama, which grew in importance and wealth until its destruction by Sir Henry Morgan in 1671.

The vision of a canal moved Charles V., in the early years of his reign, to order a survey of the Isthmus, but it was not made because the governor of Darien pronounced the project impossible. In 1550 the Portuguese navigator Antonio Galvao published a book to demonstrate that a canal could be cut at Tehuantepec, Nicaragua, Panama, or Darien; and the following year F. L. de Gomara, the Spanish historian, petitioned Philip II. to undertake the work. But the Spanish government had grown indifferent to the canal scheme, considering that a monopoly of communication with their American possessions was of greater importance than a passage by sea to Cathay. It even discouraged the improvement of the communications by land, and decreed that to seek or make known any better route than the one from Porto Bello to Panama was an offense punishable by death.

For nearly 150 years following the decree no serious move was made towards the construction of a canal. Still the vision persisted, and Champlain and other travelers who visited the Isthmus wrote more or less earnestly of the feasibility and value of such an undertaking. Spain was fighting to maintain her position in the New World, and to guard the treasure ships in their transit across the ocean. Drake and Parker and Morgan gave her plenty to do in those days.

In 1698 another advocate arose to plead the cause of an interoceanic waterway. William Paterson, a brilliant Scotchman, had spent some years of his early life in the West Indies, where his natural ability had made him a man of influence. He may have been a buccaneer, at all events he had a wide acquaintance with the captains of that class, and he became inbued with a scheme for a canal at Darien. Failing to interest the English government he went to some of the continental courts where he met with no better success. Returning to London he was drawn into business enterprises and became the founder of the Bank of England in 1694. A little later Paterson secured from the Scotch parliament a charter for the "Company of Scotland trading to Africa and the Indies." This company, according to Paterson's plan, should establish a settlement on the Isthmus of Darién, dig a canal, and "thus hold the key to the commerce of the world and turn Scotland from one of the poorest to one of the richest countries." The enterprise was popular and funds were freely contributed. The plans were conceived in a broad and beneficent spirit, differences of race and religion were to be ignored, the settlement was to be a harbor of refuge for the ships of all nations, and world-wide free trade was to be established. The settlement was planted in 1698, but its existence was troubled and it was abandoned before a sod had been turned toward the digging of a canal.

In 1771 the Spanish government changed its policy of indifference and ordered a survey of the Tehuantepec route. When that line was found to be impracticable attention was turned to Nicaragua, but before a survey could be made the political conditions in Europe were such as to prevent action.

In 1808 the Isthmus was examined by Alexander von Humboldt, who pointed out the lines which he considered worthy of study. After the Central American republics acquired their independence in 1823, interest in the canal question was greatly increased. In 1825 Nicaragua, having received applications for concessions from citizens of Great Britain, and also from citizens of the United States, made overtures to the United States for aid in constructing

Passing through Gatun Locks

a canal, but they resulted in nothing. In 1830 a concession was granted to a Dutch corporation under the special patronage of the King of the Netherlands to construct a canal through Nicaragua, but the revolution and the separation of Belgium from Holland followed, and the scheme fell through. Subsequently several concessions were granted to citizens of the United States, France, and Belgium, both for the Nicaragua and the Panama routes, but with the exception of those of 1878 and 1887, which are described below, no work of construction was done under any of them.

Knowledge of the topography of the Isthmus remained extremely vague until the discovery of gold in California in 1848 gave a great impetus to travel and rendered improved communications between the Atlantic and Pacific coasts of the United States necessary. A railroad at Panama and a canal at Nicaragua were projected. Instrumental surveys for the former in 1849, and for the latter in 1850, were made by American engineers and, with some small exceptions, were the first accurate surveys made up to that time.

The Panama Railroad, built by Americans under a concession from the republic of New Granada, now known as Colombia, was opened in 1855. For nearly fifteen years, or until the completion of the first transcontinental railroad in the United States, it formed the main line of traffic between the eastern seaboard and California. The building of the railroad had furnished more accurate knowledge of the topography and geology of the Isthmus and gave a new impetus to the consideration of a canal. It was an era of great engineering enterprise and commercial activity. In the United States the transcontinental and other railroads were projected and their construction vigorously pursued. Europe was building the Suez Canal, which would give a short and direct water route to Asia, and the attention of the world was drawn more forcibly than ever before to the Isthmus of Panama.

Beginnings of American Interest in an Isthmian Canal.—In 1866 in response to an inquiry from Congress, Admiral Charles H. Davis of the U. S. Navy, reported that "there does not exist in the libraries of the world the means of determining, even approximately, the most practicable route for a ship canal across the American Isthmus." To clear up the difficulty Congress in 1872 appointed an Interoceanic Canal Commission and provided for the sending out of a series of expeditions under officers of the navy, by whom all the routes were examined. These examinations, which were made between 1870 and 1875, proved that the only lines by which a tunnel could be avoided were those of Panama and Nicaragua, and Congress was advised—that the Nicaraguan route possessed greater advantages and offered fewer difficulties than that of Panama. The comparison of the two routes as set forth in the report was as follows: "At Panama the Isthmus is narrower than at any other point except San Blas, its width in a straight line being only 40 miles and the height of the continental divide is only about 300 feet, which is higher than the Nicaragua Summit, but less than half the height on any other route. At Nicaragua the distance is greater, being about 156 miles in a straight line, but more than one-third is covered by Lake Nicaragua, a sheet of fresh water with an area of 3,000 square miles, and a maximum depth of over 200 feet, the surface being about 105 feet above sea level. Lake Nicaragua is connected with the Atlantic by a navigable river, the San Juan, and is separated from the Pacific by the continental divide, which is about 160 feet above sea level. At Nicaragua only a lock canal is feasible, while at Panama a sea-level canal is a physical possibility."

The French Scheme.—While the American Interoceanic Canal Commission was making the investigations relative to the comparative merits of the different isthmian routes, a canal project was started in France. The popular imagination in that country had been stirred to enthusiasm by the part of Count de Lesseps in the making of the Suez Canal. Financiers began the agitation of another enterprise in which France should play the leading role. Their plans were carefully made. In 1875 the subject was discussed by the Congrès des Sciences Géographiques at Paris, and that body recommended the making of surveys with a view to building a canal. Soon after the discussion of that Congress a provisional company of speculators was formed for the purpose of securing a concession from the Republic of Colombia. Acting as agent for this company, Lieutenant L. B. N. Wyse, an officer of the French Navy, secured from the Colombian government in 1878 a concession for the construction of a canal from Colon to Panama. The concession gave the promoters the exclusive privilege of constructing and operating a canal through the territory of the republic, the only restrictive condition being that if the route chosen traversed any portion of the land given to the Panama Railroad Company, the promoters should make a satisfactory settlement with that company before beginning the work of construction. On the part of the company it was agreed that the course of the canal should be determined by an international congress of engineers.

Possessed of this valuable concession the promoting company organized what is generally known as the "Panama Canal Company" and

transferred to it what has come to be known as the Wyse Concession. Count de Lesseps became the chief engineer of the company, a fact which guaranteed the support of all classes of Frenchmen. Invitations were issued for an International Congress to determine the route of the canal.

The Congress convened at Paris in May, 1879, and among the 164 delegates in attendance were representatives from the United States, Great Britain, and Germany; but the French delegates were in the majority. It is said that the proceedings of this congress were pre-arranged; that the opinions of those delegates who were engineers of experience, with knowledge of conditions at the Isthmus, were allowed scant consideration in its deliberations; and that the desires of the unscrupulous promoters, who were back of the whole scheme, dominated the conclusions reached. At the closing session a resolution was adopted (many of the delegates refrained from voting) recommending the construction of a sea-level canal from Limon Bay to the Bay of Panama. The canal was to have a depth of 29½ feet and a bottom width of 72 feet. The cost was estimated by Lesseps at $131,600,000—an estimate far below that given by the International Congress of Paris. In the prosecution of the work itself it appears that miscalculation was followed by mismanagement. Ignorance at the outset, a blind indifference to the lessons taught by their blunders, criminal extravagance and dishonesty, all are a part of the record of the Panama Canal Company, which finally went into the hands of a receiver in February, 1889. The story of the way in which the French people had invested their savings in the enterprise is extremely pathetic and one which it is not pleasant to read. Fully two hundred thousand persons, most of them in moderate circumstances, were involved in the ruin which followed its collapse.

The New Panama Canal Company.—Five years after the appointment of a receiver for the Panama Canal Company, the New Panama Canal Company was formed. It was a private commercial organization, like its predecessor, but it proceeded with more regard for scientific knowledge than had that organization. It made a new study of the entire subject of the canal in both its engineering and commercial aspects.

New and careful surveys were made and at the same time excavation was continued in places where it was certain to be needed, whatever plan might be adopted. The result of this preliminary work was a plan which involved two levels above sea-level, one of them an artificial lake to be created by a dam at Bohio, to be reached from the Atlantic by a flight of two locks, and the other, the summit level, to be reached by another flight of two locks from the preceding. The summit level was to have its surface at high water, 102 feet above the sea, and to be supplied with water by a feeder leading from an artificial reservoir to be constructed at Alhajuela in the upper Chagres valley; the ascent on the Pacific side to be likewise by four locks. The general plan of the canal was to be about the same as that of the old company.

A Nicaraguan Canal Projected.—In 1884 a treaty was made between the United States and Nicaragua, which provided that the United States was to build a canal, without cost to Nicaragua, which after completion was to be owned and managed jointly by the two governments. The treaty was not ratified by the United States Senate and the question was dropped. In 1886 a company of private citizens was formed in New York, known as the "Nicaragua Canal Association." It was to obtain concessions, make surveys, lay out the route, and organize such corporations as should be required to construct the canal. Operations upon a moderate scale, mainly of a preliminary character, were continued until 1893. The financial disturbances of that year drove the construction company, known as the "Maritime Canal Company of Nicaragua," into bankruptcy and stopped the work. It has not since been resumed.

In 1895 Congress provided for a board of engineers to inquire into the possibility, permanence, and cost of the canal as projected by the "Maritime Canal Company." The report of this board criticized the plans and estimates of the company, and in 1897 another board was appointed to make additional surveys and prepare new plans and estimates. The report of the second board was not completed when the plans of the new French company attracted the attention of Congress, and led to the creation in 1899 of the Isthmian Canal Commission. This body was to examine all available routes, and to report which was most practicable and feasible for a canal under the "control, management, and ownership of the United States."

The United States decides to build a canal at Panama.—The Isthmian Canal Commission made an investigation of the New Panama Canal Company's project and, learning that the Colombian government would consent to an alienation of the Wyse concession, approached the French company with the object of obtaining an option on its works and property at Panama. After considerable delay and some misunderstandings, the French company offered to sell and transfer its canal rights and property to the United States for $109,141,500. The Commission considering that $40,000,000 was a liberal estimate of its value concluded its report to Congress as follows:

"In view of all the facts, and particularly in view of all the difficulties of obtaining the necessary rights, privileges, and franchises on the Panama route, and assuming that Nicaragua and Costa Rica recognize the value of the canal to themselves, and are prepared to grant concessions on terms which are reasonable and acceptable to the United States, the Commission is of the opinion that 'the most practicable and feasible route for an isthmian canal, to be under the control, management, and ownership of the United States,' is that known as the Nicaragua route."

This report brought a new offer from the New Panama Canal Company to sell out all its assets, rights, and interests in the Isthmus for the sum of $40,000,000. The consequence of this offer was the issuance of a supplementary report by the Commission in which it was stated that "After considering the changed conditions that now exist, the Commission is of the opinion that 'the most practicable and feasible route' for an Isthmian Canal to be 'under the control, management, and ownership of the United States' is that known as the Panama route."

Before this supplementary report of the Commission had been filed, the House of Representatives had passed and sent to the Senate the hastily prepared Hepburn Bill, which authorized the President to secure a concession from Nicaragua and to proceed with the construction of a canal by that route. The supplementary report was received while the Senate was considering the Hepburn Bill, and in the debates which followed, it was shown that the Panama route was favored, not only by the most eminent engineers, but, without exception, by ship owners and by the masters and pilots of steamship lines and sailing vessels, whose opinions had been sought by the late Senator Hanna.

Following the debate both branches of Congress passed the Spooner Bill, which became law on June 28, 1902. This authorized the President to acquire all the property of the New Panama Canal Company, including not less than 68,896 shares of the Panama Railroad Company, for a sum not to exceed $40,000,000, and to obtain from Colombia perpetual control of a strip of land 6 miles wide. If the company and Colombia failed to come to terms in a reasonable time, he was by treaty to obtain from Costa Rica and Nicaragua the territory necessary for the Nicaragua canal.

Colombia rejected the terms submitted by the United States. In November, 1903, the Colombian province of Panama declared its independence, and created the Republic of Panama. Within a month after the formation of the new republic, a treaty was negotiated between it and the United States which provided for the construction of the Panama Canal, and gave the United States perpetual control of a strip of territory for that purpose. (See Canal Zone.) The United States was to build a canal at Panama and to make a reality of the vision of the early explorers. The property of the French company was purchased as the Spooner Bill had directed and, in accordance with another of its provisions, the President appointed the Isthmian Canal Commission to take charge of the work of construction.

The American builders found awaiting them the same problems of health, labor, and engineering which had confronted the French companies. When the United States took charge, the workers on the spot numbered less than a thousand men and these were continued in the work of excavation at Culebra. An inventory of the items of the newly acquired property included a hospital and other buildings which were usable, machinery, only part of which was in condition for immediate use, while a considerable part of it was of no practical value whatsoever; and scientific data, surveys, and calculations, which were of inestimable value in the saving of both time and labor. The actual cash value of the various properties and of the work of excavation as computed by the engineers are shown on page 24 of this book.

The United States begins the work of construction.—It was not until May 4, 1904, that possession of the Canal Zone was granted to the United States under the Hay-Bunau-Varilla Treaty, and that the preliminary work was put in hand.

For three years the operations were purely of an experimental character, for the fundamental plan of the Canal had not been definitely determined, and the efforts of the staff, warned by the high death-rate among the employees of the old French company, were largely directed to the consideration of those sanitary measures without which it was realized that success could not be attained. As a result of the health campaign thus inaugurated yellow fever has been eradicated, bubonic plauge held at bay, malaria reduced from a virulent to a mild form, and an unhealthy country made into a desirable residential area.

The Choice of Schemes.—The question of whether a sea-level or a high-level canal with locks should be constructed was considered by an international Commission, but, although a majority reported in favor of the sea-level scheme, the minority report, which recommended a canal at an elevation of 85 feet above sea-level, was ultimately adopted. The reasons given for this selection were the reduction in cost which would accompany this scheme, the shorter time in which the canal could be constructed, and the

belief that it would give a better navigable channel than a sea-level canal.

In April, 1907, the work was placed under the control of the Engineer Corps of the U. S. Army. A new Commission was created of which Colonel George W. Goethals was made Chairman and Chief Engineer. At the same time Colonel Goethals was also made the chief executive of the Canal Zone, and President of the Panama Railroad Company.

The Labor Problem.—The establishment of sanitary conditions in the zone removed the greatest obstacle to the settlement of the labor problem. The French companies had never had more than 12,000 men working at one any time. To carry out the larger scheme of the United States an army of 30,000 to 40,000 able-bodied men would be necessary. The extra pay and cheap living, which were assured by the government, were powerful inducements to draw the idle and discontented workers of other localities. But the question was not just a case of bringing shiploads of laborers and setting them to work. A colony had to be established and provisions made to feed, clothe, shelter, and govern it. With the physical necessities of life assured, the moral and intellectual well-being of the men was considered. Homesickness is a dread disease which unfits men for doing good work. To combat it many remedies were forthcoming. Men were encouraged to bring their families and comfortable homes were provided for them. The colony was supplied with all the equipment for social life which is to be found in settled communities in the States. The Young Men's Christian Association had branches in each community and took general charge of recreation and club work. Their buildings were also utilized for religious services. The main hospital at Ancon was made a model in its equipment and service. Post offices, banks, schools, and courts were as accessible to the people of the Zone as they are to the people of New Jersey.

The workers in Panama had what we may call a personal grievance court, a luxury not to be found in the States. The presiding judge of this informal court has been called "a beneficent tyrant", but he was regarded by the men as their best friend and counselor. Every Sunday morning Colonel Goethals listened to the petty complaints and grievances of his men and they were satisfied with his judgment in nearly every case. The effect of this outlet for bad feeling can hardly be described. It saved many a good worker from the folly of throwing up his job, while in other cases it inspired an indifferent man with a sense of the importance of his work and the nobility of doing his best.

As a result of the conditions established on the Isthmus the supply of labor was equal to the demand. The workers, generally, were happy and contented, and many have left with genuine regret; while others have taken up permanent residence in Panama.

Nationality on the Isthmus.—The chiefs of the Canal, the directors, the superintendents, the clerical and medical staffs, the skilled artisans, were all Americans. Of the unskilled laborers, fully half the number employed during the work of construction was of West Indian extraction—Jamaican and Barbadian negroes. The United States, Panama, Spain, and other European countries, contributed the other half. The zone census of 1912 showed that forty nationalities were represented at that time among the workers. The whole world has had a hand in digging the Panama Canal.

Classification of Workers.—The necessity for a distinction between skilled and unskilled labor resulted in the division of employees into the "gold" and "silver" classes. The gold roll included all those drawing over $75. per month, who were paid in gold. The silver roll included all the common and unskilled laborers and these men were paid in the silver money of the Republic of Panama.

Engineering Problems.—The Chagres River, with a total drainage area of 1,320 square miles, constituted one serious problem, and others were presented by the Gatun Dam and the Culebra Cut. These problems were all interrelated and involved many minor ones. The flood waters of the Chagres, which alone formed an almost insurmountable obstacle to the building of a sea-level canal, have been restrained by the great Dam and made to furnish the water for the lock canal as it is to-day. The making of Culebra Cut involved cutting through the continental divide for nine miles, and the removal of millions of cubic yards of earth and rock.

The Beginning of the End.—One by one the problems were met and solved. October 13, 1913, was a great day in the history of the Canal for it witnessed the destruction of Gamboa dike whose removal permitted the water to enter the Cut. From that time on all excavation was done by dredging. The first passage of a self-propelling vessel through the Canal from ocean to ocean was made on January 7, 1914. The vessel thus honored was *La Valley*, a unit of the old French floating equipment, one of the items acquired by purchase from our brave but unfortunate predecessors on the Isthmus. Thus the Canal is a reality, it is a vision no longer. Soon the ships of all nations will be passing through the channel and the world will grow accustomed to its use and its benefits.

For nine years the world has watched the work progress; thousands have journeyed to the Isthmus to have a glimpse of the Canal in

the making; while those who could not go have followed each step of achievement with no less of interest. Countless illustrated papers and magazines have made the Canal known to all who read, and the Cut, the Dam, the Locks, the Lakes, and the Slides, are now familiar terms in every community. Americans have a right to be proud of the Canal and of the men who have built it. The names of Goethals and Gorgas and their brave associates are held in highest honor and can not be forgotten while the Canal shall serve the world.

III. THE CANAL ZONE

Under the Treaty with Panama the United States acquired a strip extending for five miles on either side of the Canal, and all other lands and land under water needed for Canal purposes. The Canal Zone contains about 436 square miles, about 95 of which are under the waters of the Canal and Gatun and Miraflores Lakes. It begins at a point 3 marine miles from mean low water mark in each ocean, and extends for 5 miles on each side of the center line of the route of the Canal. It includes the group of islands in the Bay of Panama named Perico, Naos, Culebra, and Flamenco. The cities of Panama and Colon, are excluded from the Zone, but the United States has the right to enforce sanitary ordinances in those cities, and to maintain public order in them in case the Republic of Panama should not be able, in the judgment of the United States, to do so.

Of the 436 square miles of Zone territory the greater part is owned by the United States and the Panama Railroad Company, the balance being owned by private individuals and corporations. The Treaty gives the United States a title in the nature of an option on privately owned lands, upon condition that the United States compensate the owners of the lands in exercising its rights. All of the privately owned lands in the Canal Zone are being taken over on behalf of the United States by virtue of the Executive Order of the President of December 5, 1912, acting by authority of the Panama Canal Act of August 24, 1912.

The United States has jurisdiction and ownership over the area to be covered by Gatun Lake, which extends beyond the line of the Canal Zone.

Mandingo Stockade for Canal Zone Convicts, Engaged in Road Building

Gatun Lake will have a summit level of 87 feet, and the Government of the United States has taken an additional strip around the lake littoral up to the 100-foot level, the additional strip being needed for police and sanitary purposes. The area of this territory is approximately 95½ square miles.

The population of the Canal Zone, official census, is 62,810; of Panama City, 37,505; of Colon, 17,749.

IV. DESCRIPTION OF THE PANAMA CANAL

The Panama Canal does not cross the Isthmus from east to west, but, as is shown on the accompanying map, its general direction is

from northwest to southeast, the Pacific entrance near Panama being about 22½ miles east of the Atlantic entrance near Colon. The isthmus at the Canal Zone is about 40 miles wide and the entire length of the Canal from deep water in the Atlantic to deep water in the Pacific is about 50 miles. Of this length about 15 miles are at sea-level, seven miles at the Colon end and eight at the Panama end. The remainder consists of two elevated reaches, the longer of which—that between Gatun and Pedro Miguel locks—is about 32 miles in length and 85 feet above sea-level, while the shorter—between Pedro Miguel and Miraflores—is about two miles long and about 55 feet above sea-level. From Gatun for a distance of 24 miles the Canal follows roughly the channel of the Chagres River, and the greater part of this portion has been converted into Gatun lake.

CHANNEL DIMENSIONS.—The depth of water on the sills of the locks ranges from 41 feet to 45 feet. The widths of the bottom of the Canal channel in its several sections are as follows: The bottom width from the Caribbean Sea to the Gatun locks, a distance of 6-7 miles, is 500 feet. From these locks to a point 23½ miles from the sea the width is 1,000 feet. From this point it narrows to 800 feet, 700 feet, and 500 feet, and for the eight miles through the Culebra Cut the bottom width is reduced to 300 feet. From Pedro Miguel to Miraflores it widens to 500 feet, and that width is maintained to deep water in the Bay of Panama. The minimum depth of water is 41 feet. Thus provision has been made for the largest ocean-going ships.

GATUN DAM.—The Gatun Dam, which forms Gatun Lake by impounding the waters of the Chagres and its tributaries, is nearly 1½ miles long, measured on its crest, nearly ½ mile wide at its base, about 400 feet wide at the water surface, about 100 feet wide at the top, and its crest is 105 feet above mean sea-level, or 20 feet above the normal level of the Lake. It is in reality a low ridge uniting the high hills on either side of the lower end of the Chagres Valley so as to convert the valley into a huge reservoir. Of the total length of the Dam only 500 feet, or one-fifteenth, is exposed to the maximum water head of 85 to 87 feet. The interior of the Dam is formed of a natural mixture of sand and clay, dredged by hydraulic process from pits above and below the Dam, and placed between two large masses of rock and miscellaneous material obtained from steam shovel excavation at various points along the Canal. The top and upstream slope are thoroughly riprapped. The entire Dam contains about 21,000,000 cubic yards of material.

Spillway of Gatun Dam

THE SPILLWAY, GATUN DAM.—The Spillway is a concrete lined channel 1,200 feet long and 285 feet wide, cut through a hill of rock nearly in the center of the Dam, the bottom being 10 feet above sea-level at the upstream end and sloping to sea-level at the toe. Across the upstream or lake opening of this channel a concrete dam has been built in the form of an arc of a circle making its length 808 feet although it closes a channel with a width of only 285 feet.

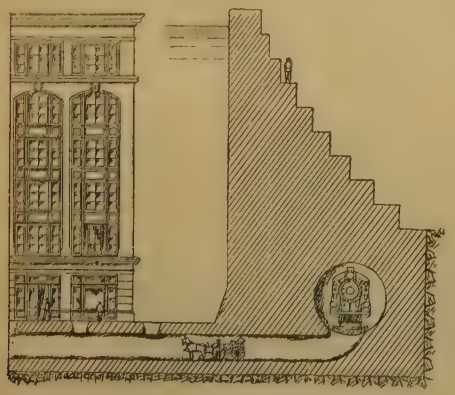
The crest of the dam is 69 feet above sea-level, or 16 feet below the normal level of the lake which is 85 feet above sea-level. On the top of this dam there are 13 concrete piers with their tops 115.5 feet above sea-level, and between these there are mounted regulating gates of the Stony type. Each gate is of steel sheathing on a framework of girders and moves up and down on roller trains in niches in the piers. They are equipped with sealing devices to make them water-tight. Machines for moving the gates are designed to raise or lower them in approximately ten minutes. The highest level to which it is intended to allow the lake to rise is 87 feet above sea-level, and it is probable that this level will be maintained continuously during wet seasons. With the lake at that elevation, the regulation gates will permit of a discharge of water greater than the maximum known discharge of the Chagres River during a flood.

Gatun Lake, the Dying Jungle

GATUN LAKE AND ITS WATER SUPPLY.—This artificial lake, created by building the Gatun Dam, impounds the waters of a basin comprising 1,320 square miles. Its elevation varies with the seasons from 80 to 87 feet above sea-level. When the surface of the water is at 85 feet above sea-level, the lake has an area of about 164 square miles, and contains about 183 billion cubic feet of water. During eight or nine months of the year, the lake is kept constantly full by the prevailing rains, and consequently it is necessary to store a surplus for only three or four months of the dry season. The smallest run-off of water in the basin during the past 22 years, as measured at Gatun, was that of the fiscal year, 1912, which was about 132 billion cubic feet. Previous to that year the smallest run-off of record was 146 billion cubic feet. In 1910 the run-off was 360 billion cubic feet, or a sufficient quantity to fill the lake one and a half times. The low record of 1912 is of interest as showing the effect which a similar dry season, occurring after the opening of the Canal, would have upon its capacity for navigation. Assuming that the Gatun Lake was at elevation plus 87 at the beginning of the dry season on December 1st, and that the hydroelectric plant at the Gatun Spillway was in continuous operation, and that 48 lockages a day were being made, the elevation of the lake would be reduced to its lowest point, plus 79.5, on May 7th, at the close of the dry season, after which it would continuously rise. With the water at plus 79 in Gatun Lake there would be 39 feet of water in Culebra Cut, which would be ample for navigation. The water surface of the lake will be maintained during the rainy season at 87 feet above sea-level, making the minimum channel depth in the Canal 47 feet. As navigation can be carried on with about 39 feet of water, there will be stored for the dry season surplus over 7 feet of water. Making due allowance for evaporation, seepage, leakage at the gates, and power consumption, this would be ample for 41 passages daily through the locks, using them at full length, or about 58 lockages a day when partial length is used, as would be usually the case, and when cross filling from one lock to the other through the central wall is

employed. This would be a larger number of lockages than would be possible in a single day.

The water level of Gatun Lake, extends through the Culebra Cut, and is maintained at the south end by an earth dam connecting the locks at Pedro Miguel with the high ground to the westward, about 1,400 feet long, with its crest at an elevation of 105 feet above mean tide. A concrete core wall, containing about 700 cubic yards, connects the locks with the hills to the eastward; this core wall rests directly on the rock surface and is designed to prevent percolation through the earth, the surface of which is above the Lake level.



Side Wall of Locks Compared with Six Story Building

THE CULEBRA CUT.—The points of deepest excavation in the Canal are in Culebra Cut, between Gold and Contractor's Hills. The widest part of the Cut is opposite the town of Culebra, where owing to the action of slides on both banks, the top width is about half a mile. This is one of the most important and impressive sections of the work, for it carries the Canal through the watershed of the Isthmus. The material was not difficult to excavate, but as it disintegrated into mud when exposed to the atmosphere and rain, the trouble was not the removal of millions of tons of material but the numerous "slides." These may be described as a glacier-like movement of soft material on layers of slippery clay.

The channel through the Cut is a gently winding stream, shut in by the hills on either side. In a few years the rapid growth of tropical vegetation will cover up the scars made by excavation and the man-made canyon will appear to the tourist as one of Nature's own creations.

As before stated, the water in the Cut is at the same level as Gatun Lake, 85 feet above sea-level, and it comes from the same source, mainly the Chagres River.

MIRAFLORES LAKE AND SPILLWAY.—A small lake between the locks at Pedro Miguel and Miraflores is formed by dams connecting the walls of Miraflores locks with the high ground on either side. The dam to the westward is of earth, about 2,700 feet long, having its crest about 15 feet above the water in Miraflores Lake. The east dam is of concrete, containing about 75,000 cubic yards; is about 500 feet long, and forms a spillway for Miraflores Lake, with crest gates similar to those at the Spillway of the Gatun Dam.

LOCKS.—There are 6 double locks in the Canal; three pairs in flight at Gatun, with a combined lift of 85 feet; one pair at Pedro Miguel, with a lift of 30⅛ feet, and two pairs at Miraflores, with a combined lift of 54⅔ feet at mean tide. The usable dimensions of all are the same—a length of 1,000 feet, and width of 110 feet. Each lock is a chamber, with walls and floor of concrete, and mitering gates at each end.

The side walls are 45 to 50 feet wide at the surface of the floor; are perpendicular on the face, and narrow from a point 24½ feet above the floor until they are 8 feet wide at the top. The middle wall is 60 feet wide, approximately 81 feet high, and each face s vertical. At a point 42½ feet above the surface of the floor, and 15 feet above the top of the middle culvert, this wall divides into two parts, leaving a space down the center much like the letter "U," which is 19 feet wide at the bottom and 44 feet wide at the top. In this center space is a tunnel divided into three stories, or galleries. The lowest gallery is for drainage; the middle, for the wires that carry the electric current to operate the gate and valve machinery installed in the center wall, and the upper is a passageway for the operators.

The lock gates are steel structures seven feet thick, 65 feet long, and from 47 to 82 feet high. They weigh from 390 to 730 tons each. Ninety-two leaves are required for the entire Canal, the total weighing 60,000 tons. The leaves are shells of structural steel covered with a sheathing of steel riveted to the girder framework. Each leaf is divided horizontally into two separate compartments. The lower compartment is watertight, for the purpose of making the leaf so buoyant that it will practically float in the water and thus largely relieve the stress upon the bearings by which it is hinged to the wall. This watertight compartment is subdivided vertically into three sections, each independently watertight, so that if the shell should be broken in any way or begin to leak, only one section would probably be affected. An air shaft 26 inches in diameter runs from the bottom compartment up to the top of the gate, and this also is watertight where it passes through the upper half of the leaf.

Intermediate gates are used in all except one pair of the locks, in order to save water and time, if desired, in locking small vessels through, the gates being so placed as to divide the locks into chambers 600 and 400 feet long, respectively. Ninety-five per cent of the vessels navigating the high seas are less than 600 feet long.

The locks are filled and emptied through a system of culverts. One culvert, 254 sq. ft. in area of cross section, about the area of the Hudson River tunnels of the Pennsylvania railroad, extends the entire length of each of the middle and side walls. From each of the large culverts there are several smaller culverts, 33 to 44 sq. ft. in area, which extend under the floor of the lock and communicate with the lock chamber through holes in the floor. The large culverts are controlled at points near the miter gates by large valves and each of the small culverts extending from the middle wall feeds in both directions through laterals, thus permitting the passage of water from one twin lock to another, effecting a saving of water.

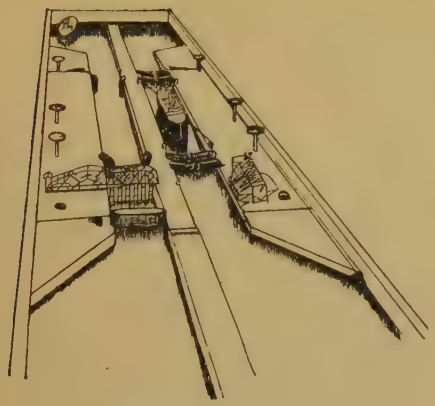
To fill a lock the valves at the upper end are opened and the lower valves closed. The water flows from the upper pool through the large culverts into the small lateral culverts and thence through the holes in the floor into the lock chamber. To empty a lock the valves at the upper end are closed and those at the lower end are opened and the water flows into the lower lock or pool in a similar manner. This system distributes the water as evenly as possible over the entire horizontal area of the lock and reduces the disturbance in the chamber when it is being filled or emptied.

The average time in filling and emptying a lock is about fifteen minutes, without opening the valves so suddenly as to create disturbing currents in the locks or approaches. The depth of water over the miter sills of the locks is 40 feet in salt water and 41½ feet in fresh water.

Time Required for Passage Through the Canal.—The time required to pass a vessel through all the locks is about 3 hours; one hour and a half in the three locks at Gatun, and about the same time in the three locks on the Pacific side. The time of passage of a vessel through the entire Canal is from 10 to 12 hours, according to the size of the ship, and the rate of speed at which it can travel.

Balboa Terminal

Towing Locomotives.—Ships are not allowed to pass through the locks under their own power, but are towed through by electric locomotives operating on tracks on the lock walls. The system of towing provides for the passing through the locks of a ship at the rate of 2 miles an hour. The number of locomotives varies with the size of the vessel. The usual number required is 4: 2 ahead, 1 on each wall, imparting motion to the vessel, and 2 astern, 1 on each wall, to aid in keeping the vessel in a central position and to bring it to rest when entirely within the lock chamber. They are equipped with a slip drum, towing windlass, and hawser which permit the towing line to be taken in or paid out without actual motion of the locomotive on the track. The locomotives run on a level, except when in



Model of Pedro Miguel Lock

passing from one lock to another they climb heavy grades. There are two systems of tracks, one for towing and the other for the return of the locomotives when not towing. The towing tracks have center racks or cogs throughout, and the locomotives always operate on this rack when towing. At the incline between locks the return tracks also have rack rails, but elsewhere the locomotives run by friction. The only crossovers between the towing and return tracks are at each end of the locks, and there are no switches in the rack rail.

Protective Devices.—Several protective devices have been adopted to safeguard the gates in the locks.

First.—Fender chains, 24 in number, each weighing 24,098 pounds, are placed on the upstream side of the guard gates, intermediate and safety gates of the upper locks, and in front of the guard gates at the lower end of each flight of locks. They prevent the lock gates from being rammed by a ship that may approach the gates under its own steam or by escaping from the towing locomotives. In operation, the chain is stretched across the lock chamber from the top of the opposing walls, and when it is desired to allow a ship to pass, the chain is lowered into a groove made for the purpose in the lock floor. It is raised again after the ship passes. The raising and lowering are accomplished from both sides by mechanism mounted in chambers or pits in the lock walls. This mechanism consists of a hydraulically operated system of cylinders, so that 1 foot of movement by the cylinder will accomplish 4 feet by the chain. If a ship exerting a pressure of more than 750 pounds to the square inch should run into the fender, the chain will be paid out gradually by an automatic release until the vessel comes to a stop. Thus, a 10,000-ton ship, running at 4 knots an hour, after striking the fender can be brought to a stop within 73 feet, which is less than the distance which separates the chain from the gate.

Second.—Double gates are provided at the entrances to all the locks and at the lower end of the upper lock in each flight, the guard gate of each pair protecting the lower gate from ramming by a ship which might possibly get away from the towing locomotives and break through the fender chain.

Third.—A dam of the movable type called an emergency dam is placed in the head bay above the upper locks of each flight for the purpose of checking the flow of water through the locks in case of damage, or in case it should be necessary to make repairs, or to do any work in the locks which would necessitate the shutting off of all water from the lake levels. Each dam is constructed on a steel truss bridge of the cantilever type, pivoted on the side wall of the lock approach, and when not in use resting on the side wall parallel to the channel. When the dam is used the bridge is swung across the channel with its end resting on the center wall of the lock. A series of wicket girders hinged to this bridge are then lowered into the channel with their ends resting in iron pockets embedded in the lock floor. After the girders have been lowered into place, they afford runways for gates which can be let down one at a time closing the spaces between the wicket girders. These gates form a horizontal tier spanning the width of the Canal and damming the water to a height of 10 feet. Another series of panels are then lowered, and so on until the dam, constructed from the bottom upward. completely closes the channel. When the dam has checked the main flow, the remainder, due to the clearance between the vertical sides of the gates, may be checked by driving steel pipes between the sides of the adjacent panels. These dams are operated in three movements, and the machinery for operating is, therefore, in three classes, gate-moving, raising and lowering the wicket girders, and hoisting the gates on the girders, all driven by electric motors.

Electrical Control of Lock Mechanism.—Not the least interesting feature of the Panama Canal from the engineering point of view is the arrangements adopted for working the machinery connected with the locks at Gatun, Pedro Miguel, and Miraflores. The electrical energy employed for this purpose is generated at the hydroelectric station at Gatun Dam, with an emergency Curtis steam turbine plant at Miraflores, and is transmitted across the Isthmus by a 44,000-volt line connecting Christobal and Balboa with those two stations. The extent and intricacy of the installations may be judged from the fact that at Gatun Locks there are 218 electric motors,

at Pedro Miguel 122, and at Miraflores 160, a total of 500. They range in capacity from ¼ to 70 h.p., and their aggregate h.p. is 12,020. At Gatun there are 40 motors of 25 h.p. each for moving the leaves of the gates, at Pedro Miguel 24, and at Miraflores 28. When the gates are closed they are held in position by a device called a mitre forcing machine, the operation of which requires 46 motors of 7 h.p. at the three locks.

The fender chains described in a preceding paragraph are raised and lowered by a method similar to that employed in hydraulic lifts, and two motors are used in each case, one driving the main pump that supplies water under pressure, and the other working the valve which controls the direction of movement of the chain. The pump motors are of 70 h.p. each and the valve motors of ¼ h.p., there being in all 48 of each sort at the three locks.

For regulating the flow of water in the culverts by which the locks are emptied and filled a large number of valves are employed, with an elaborate system of duplication to prevent interruption of working. These valves are known as rising stem gate valves, cylindrical valves, guard valves, and auxiliary culvert valves, and for their operation at the three locks are required 266 motors, of 7, 25, and 40 h.p. and with an aggregate capacity of 6,014 h.p.

The length of the various locks and the wide separation of the many operating machines, necessitated the employment of a method of control which would obviate the many opportunities for mistakes certain to occur if a large force of operators was along the locks. The ordinary mechanical devices for central control were likewise out of the question, because of the great distances involved. It was therefore decided to adopt centralized electrical control, so that all of the operations are now effected from control boards located in buildings on the center walls between the lock channels, and at points which command the best possible view of the locks. The operator, however, does not depend on an actual view of conditions in the locks, such as the position of gates, guard chains, and other apparatus, for the control boards are equipped with indicators which reproduce the action of the various lock mechanisms in miniature.

The control boards are of the flat-top bench-board type, 32 inches high by 54 inches wide, and 64 feet long at Gatun; 36 feet at Pedro Miguel, and 52 feet at Miraflores. The water in the locks is represented by blue marble slabs, and the side and center walls by cast iron plates. The indicator for each of the lock gates consists of a pair of aluminum leaves, shaped to correspond to the plan view of the top of the gates, which travel horizontally just above the top of the board. The position of the chain fenders is shown by small aluminum chains which follow the movements of the chains in the locks, the actual position of the chains from the bottom of the lock being indicated by the angle of semaphore arms attached to them. The position of the rising stem valves is indicated on an arrangement which resembles a small elevator, the index being constituted by a small aluminum cage which moves up and down. The level of the water in the various locks is given on vertical scales and an accuracy of within five-eighths of an inch of the actual level was required by the specifications, but the indicators attained an accuracy even greater than this.

There are some machines which are not represented by working models on the control board. For these, position indicators are not necessary, as all the operator requires to know is whether they are in open or closed position, and they are operated merely by control switches and their open or closed position indicated by various colored lights.

Mechanical Interlocking.—It was very necessary to arrange the operating controls so that the operator would maneuver the switch handles in a predetermined sequence and also to prevent the man in charge of one channel interfering with the mechanism under the jurisdiction of the man in charge of the other channel. To this end an elaborate interlocking system was provided. Vertical shafts, worked by connecting rods from the control switches, extend downward past the electrical parts to the interlocking mechanism which is disposed in vertical racks at such a distance below each edge of the control boards that it can be inspected and oiled from a floor which is about 7 feet below the floor on which the switchboard operator stands. It is essentially a bell-crank mechanism, connecting the shaft of the control switch through a movable horizontal bar to a vertical operating shaft which can or cannot move according to the relative positions of the interlocking bars and dogs. Its action depends mainly on the engagement of bevel dogs carried on horizontal and vertical bars, the movement of a horizontal bar tending to lift a vertical bar by the bevels on the dogs. A horizontal bar cannot be moved without raising a vertical bar. Thus if at any time a dog on a horizontal bar rests against the upper end of a dog on a vertical bar, no movement of the horizontal bar where the dog engages with the vertical bar can take place, and the control handle connected to that particular horizontal bar is locked. Over 2¼ miles of interlocking rod are employed in the control boards at the three locks.

Some examples may be given to illustrate the functions of the interlocking mechanism. To

In Gatun Locks

ensure that a chain fender shall always be in the taut or up position to protect a closed gate, interlocks prevent the chain from being lowered until the adjacent gates have been opened, and the gates from being opened until the chain is in the raised position. Again the switch controlling the mitre forcing machine cannot be moved unless the gates are closed, and while the mitre forcing machine is open the rising stem valves of the side wall next above or below a gate must be closed—that is, the valves above or below a gate must remain closed until the gate itself is closed, thus preventing the operator from causing a current of water around the gates while they are open or are being moved for opening or closing. Again there are elaborate interlockings to safeguard the manipulation of the various valves. Thus to prevent any possibility of the locks being flooded when the valves are in a certain position, the rising stem valves of the side wall are interlocked with those of the middle wall a lock length away. Such diagonal interlocking when the cylindrical valves are open is wanted to prevent the flow of water from, say, the upper lock by way of a side wall culvert to the middle lock, and thence by way of the middle wall culvert to the lower lock, with the result of flooding the lower lock walls. In some cases an interlock can be released by means of a Yale key, as, for example, when a large vessel is passing through and it is necessary for the intermediate gates to be thrown open to obtain a 1,000 feet level.

These electrical control boards incorporate the ideas of a number of skilled engineers, so that every contingency has been foreseen and everything in the manner of safeguards installed to prevent mistakes and accidents. The greatest credit for these models of engineering skill is due to Mr. Edward Schildhauer, electrical and mechanical engineer of the Isthmian Canal Commission, who was in turn ably assisted by Engineers C. B. Larzelere and W. R. McCann.

Passing a Ship Through the Locks.—A ship to be raised to the lake level comes to a full stop in the forebay of the lower lock, prepared to be towed through one of the duplicate locks by electric towing locomotives. The water in the lower lock chamber is equalized with the sea-level channel, after which the miter gates are opened, the fender chain lowered and the vessel passed into the first chamber, where the water is at sea-level. Then the miter gates are closed. The rising stem gate valves at the outlet of the main culverts are closed, while those above are opened, allowing water to flow from an upper level into the lower chamber, which, when filled, raises the vessel 28½ feet, to the second level. This operation is repeated in the middle and upper locks until the ship has been raised to the full height of 85 feet above the level of the sea. At Gatun, in the passing of a large ship through the locks, it is necessary to lower 4 fender chains, operate 6 pairs of miter gates and force them to miter, open and close 8 pairs of rising stem gate valves for the main supply culverts, and 30 cylindrical valves. In all, no less than 98 motors are set in motion twice during each lockage of a

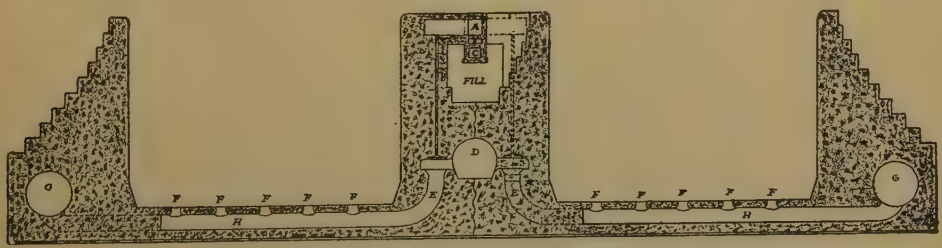
Mindi Excavation, Looking North from East Bank of Canal

single ship, and this number may be increased to 143, dependent upon the previous conditions of the gates, valves, and other devices.

Lighting the Canal.—The general scheme of lighting and buoying the Canal includes the use of range lights to establish direction on the longer tangents and of side lights spaced about 1 mile apart to mark each side of the channel. The range lights are omitted in Culebra Cut, where their use is hardly practicable, and on four of the shorter tangents on the remainder of the Canal. In the Cut there are three beacons at each angle, and between these are intermediate beacons in pairs on each side of the Canal. By keeping his ship pointed midway between these beacons, the pilot is able to adhere closely to the center of the Canal. At each tangent it is necessary to have two ranges of two lights each to prolong the sailing line in order that the pilot may hold his course up to the point of turning. These range lights are situated on land. There are three types constructed, all of reinforced concrete. The more elaborate structures are used on the Gatun locks and dam and in the Atlantic and Pacific Divisions, where they are closer to the sailing lines of the vessels, while simpler structures are placed in the Gatun Lake, where they are under less close observation. A light and fog signal on the west breakwater in Limon Bay is also included, and a light on the east breakwater. The illuminants are gas and electricity, the latter being used whenever the light is sufficiently accessible. For the floating buoys, and for the towers and beacons which are in inaccessible places, the system using compressed acetylene dissolved in acetone has been adopted. The buoys are composed of a cylindrical floating body or tank, surmounted by a steel frame which supports the lens at a height of about 15 feet above the water level. The buoys are moored in position along the edge of the dredged channel by a heavy chain and a concrete sinker, and should remain lighted for six to twelve months without being recharged. The candlepower of the range lights varies according to the length of the range, from about 2,500 to 15,000 candlepower. The most powerful lights are those marking the sea channels at the Atlantic and Pacific entrances, they being visible from about 12 to 18 nautical miles. The beacons and gas-buoy lights have about 850 candlepower. White lights are used throughout, and, in order to eliminate the possibility of confusing the lights with one another and with the lights on shore, all range lights, beacons, and buoys have individual characteristics formed by flashes and combinations of flashes of light and dark intervals.

Breakwaters.—Breakwaters have been constructed at the Atlantic and Pacific entrances of the Canal. That in Limon Bay or Colon Harbor, extends into the bay from Toro Point at an angle of 42° and 53° northward from a base line drawn from Toro Point to Colon light, and is 10,500 feet in length, or 11,700 feet, including the shore connection, with a width at the bottom of fifteen feet and a height above mean sea-level of ten feet. The width at the bottom depends largely on the depth of water. It contains approximately 2,840,000 cubic yards of rock, the core being formed of rock quarried on the mainland near Toro Point, armored with hard rock from Porto Bello. Work began on the breakwater in August, 1910, and on December 1, 1912, the trestle and fill were completed to full length, 11,500 feet. The estimated cost is $5,500,000. A second breakwater is being built in Limon Bay, known as the east breakwater. It will be without land connection and about one mile long. The purpose of the breakwaters is to convert Limon Bay into a safe anchorage, to protect shipping in the harbor of Colon, and vessels making the north entrance to the Canal, from the violent northers that are likely to prevail from October to January, and to reduce to a minimum the amount of silt that may be washed into the dredged channel.

The breakwater at the Pacific entrance extends from Balboa to Naos Island, a distance of about



CROSS SECTION OF LOCK CHAMBER AND WALLS OR LOCKS

A.—Passageway for operators. B.—Gallery for electric wires. C.—Drainage gallery. D.—Culvert in center wall. E.—These culverts run under the lock floor and alternate with those from sidewalls. F.—Wells opening from lateral culverts into lock chamber. G.—Culvert in sidewalls. H.—Lateral culverts.

17,000 feet, or a little more than three miles. It lies from 900 to 2,700 feet east of and for the greater part of the distance nearly parallel to the axis of the Canal prism; varies from 20 to 40 feet in height above mean sea-level, and is from 50 to 3,000 feet wide at the top. It contains about 18,000,000 cubic yards of earth and rock, all of which was brought from Culebra Cut. It was constructed for a twofold purpose; first, to divert cross-currents that would carry soft material from the shallow harbor of Panama into the Canal channel; second, to furnish rail connection between the islands and the mainland. Work was begun on it in May, 1908, and on November 6, 1912, the last piles were driven connecting Naos Island with the mainland.

V. SAVING OF TIME EFFECTED BY THE PANAMA CANAL

From report by Emory R. Johnson, Special Commissioner on Panama Traffic and Tolls.

"The time and fuel costs which vessels can save by using the Panama Canal instead of some other route are the measure of the Canal's service to commerce. The saving in time of voyage resulting from the reduction which the canal may make in the length of an ocean route will depend upon the speed of the vessel and upon the number of hours required to make the passage through the canal. In the tables found on pages 31 and 32 the number of days that may be saved by using the Panama Canal is calculated for vessels of five different speeds—for steamers of 9, 10, and 12 knots, which are the speeds at which freight vessels are operated, and for ships of 14 and 16 knots, the speed of most passenger vessels. A half day is deducted in each instance to allow for the detention of the vessel in making the transit through the canal. When the comparison is between Panama and Suez, it is assumed that the passage through the Suez Canal will delay a vessel a half day. It will be understood that the length of each route through the Panama or Suez Canal (as from New York via Panama to San Francisco or from New York via Suez to Hongkong) includes the length of the canal—41 nautical miles for the Panama Canal and 87 miles for the Suez—and that the half-day taken from the "number of days saved," as stated in the tables, is the deduction made to allow for the longer time required to make the distance between the canal terminals than would be required to steam the same number of miles at sea.

Southern China and the Philippines—Hongkong and Manila—are near the center of the section whose commerce with New York and other north Atlantic ports of the United States may use the Panama or Suez Canal with equal advantage, as far as distance and time of voyage are concerned. Relative tolls and coal prices via the alternative routes, and the traffic possibilities at intermediate ports, rather than the days to be saved by taking one route rather than the other will determine whether the Panama or the Suez Canal will be used by vessels bound to or from that part of the Orient. Of the commerce of the western side of the Pacific with Europe, only the trade of New Zealand can save time by using the Panama instead of the Suez or some other alternative route. The point on the west coast of South America equally distant from a port of Europe via the Panama Canal and the Straits of Majellan is somewhat south of 40 degrees south latitude. Coronel, the most southerly port mentioned in Table B., is about 37 degrees south of the equator." (See pages 31 and 32.)

VI. ESTIMATED COST OF THE PANAMA CANAL

The cost estimated by the present Commission for completing the Canal is $325,201,000, which includes $20,053,000 for sanitation, and $7,382,000 for civil administration.

These figures do not include the money paid to the New French Canal Company and to the Republic of Panama for property and franchises. Hence, it is estimated that the total cost of the Canal to the United States will approximate $375,000,000.

VII. CANAL STATISTICS

Length from deep water to deep water (miles)	50
Length from shore line to shore line (miles)	40
Bottom width of channel, maximum (feet)	1,000
Bottom width of channel, minimum, 9 miles in Culebra Cut (feet)	300
Locks, in pairs	12
Locks, usable length (feet)	1,000
Locks, usable width (feet)	110
Gatun Lake, area (square miles)	164
Gatun Lake, channel depth (feet)	85 to 45
Culebra Cut, channel depth (feet)	45
Excavation, Canal Proper, estimated total (cubic yards)	209,668,000
Excavation, Permanent Structures, including terminals, estimated (cubic yards)	22,685,000
Excavation, grand total, estimated (cubic yards)	232,353,000
Excavation, Due to Slides and Breaks, estimated (cubic yards) about	25,000,000
Excavation accomplished January 1, 1914, (cubic yards)	215,458,272
Excavation, Remaining, Canal Proper, January 1, 1914, (cubic yards)	16,894,728
Excavation by the French (cubic yards)	78,146,960
Excavation by French, useful to present Canal, (cubic yards)	29,908,000
Excavation by French, estimated value to Canal	$25,389,240
Value of all French property	$42,799,826
Concrete, total estimated for Canal (cubic yards)	5,208,800
Time of transit through completed Canal (hours)	10 to 12
Time of passage through locks (hours)	3

Culebra Cut, with water at 80-foot level

Relocated Panama Railroad, total cost	$8,866,392.02
Relocated Panama Railroad, length (miles)	47.11
Canal Zone, area (square miles)	436
Canal and Panama Railroad force actually at work in September, 1913 (about)	37,000
Canal and Panama Railroad force, Americans, in September, 1913 (about)	5,000
Cost of Canal, estimated total	$375,000,000
Work begun by Americans	May 4, 1904
Date of official opening	Jan. 1, 1915

VIII. CANAL EXCAVATION TO JANUARY 1, 1914

By French Companies		78,146,960
French excavation useful to present Canal		29,908,000
By Americans—		
Dry excavation	128,747,980	
Dredges	86,710,292	
Total		215,458,272
May 4 to December 31, 1904	243,472	
January 1 to December 31, 1905	1,799,227	
January 1 to December 31, 1906	4,948,497	
January 1 to December 31, 1907	15,765,290	
January 1 to December 31, 1908	37,116,735	
January 1 to December 31, 1909	35,096,166	
January 1 to December 31, 1910	31,437,677	
January 1 to December 31, 1911	31,603,899	
January 1 to December 31, 1912	30,269,349	
January 1, 1913 to January 1, 1914	27,177,960	

TOTALS BY SECTIONS AND AMOUNTS TO BE EXCAVATED.

SECTIONS	Amount excavated		Remaining to be excavated	
Atlantic—				
Dry excavation	8,854,351	48,878,262	649	4,288,738
Wet	40,023,911		4,288,080	
Central—				
Culebra Cut	98,734,571	111,511,643	6,277,429	6,369,501
All other points	12,777,072		92,072	
Pacific—				
Dry excavation	10,372,087	55,068,367	415,913	6,420,633
Wet	44,696,280		6,004,720	
Grand total		215,458,272		17,078,872

IX. VALUE OF THE $40,000,000 FRENCH PURCHASE

A careful official estimate has been made by the Canal Commission of the value to the Commission at the present time of the franchises, equipment, material, work done, and property of various kinds for which the United States paid the French Canal Company $40,000,000. It places the total value at $42,799,826, divided as follows:

Excavation, useful to the Canal, 29,908,000 cubic yards	$25,389,240
Panama Railroad Stock	9,644,320
Plant and material, used and sold for scrap	2,112,063
Buildings, used	2,054,203
Surveys, plans, maps and records	2,000,000
Land	1,000,000
Clearings, roads, etc	100,000
Ship channel in Panama Bay, four years' use	500,000
Total	$42,799,826

X. PROBABLE EFFECTS OF THE PANAMA CANAL

The Panama Canal has been added to the wonders of the world. A continent has been cut in two and two great oceans have been linked for the purposes of trade. The construction of the Canal has aroused a wider interest than any other undertaking since History began a record of human achievements. This is a time when hope runs high, and, flushed with the successful completion of what is pronounced "the greatest engineering feat of the ages," there is danger of losing sight of the work which yet remains to be done if the world is to realize the full "substance of things now hoped for." The Canal is destined to work changes slowly. Generations will come and go before its full effects will become visible. How much of wisdom and forbearance will be necessary to settle justly the intricate changes in transportation rates, the delicate questions of diplomacy which will arise, and countless other matters upon whose proper adjustment the successful operation of the Canal will, in a great measure, depend! What deepening of harbors, improving of inland waterways, building of railroads and ships must be accomplished in order to secure the benefits for which mankind is looking!

The attention of the great world of business has for years been focused upon the new opportunities which are now offered, and preparations to take advantage of them have been steadily going forward. With the completion of the waterway the general public also turns from the mighty and spectacular feats of engineering, which, during the period of construction, have absorbed its attention, and asks "What is the Canal going to do for the world at large and the United States in particular?" Experts in trade and economic problems, thoughtful men in every branch of commercial activity have been weighing those questions and have tried to settle what the economic effects of the new thoroughfare will be, and the result is disagreement at many points. Absolute agreement of opinion upon a matter involving so many and such complex relations was not to be expected. There have been prophets of both good and evil; but the pessimists form an insignificant minority. The extreme optimist will hardly see all of his predictions verified; the pessimists will have some happy disappointments. Wise men

have known all along, that engineering problems were not the only puzzles involved in this great work and that only time and experience can settle those that attend upon its operation and economic results. The conviction that the completion of the Canal marks the dawn of a new era which will greatly add to the prosperity, happiness, and peace of the world is generally entertained. This healthy optimism will enable the workers of the world, under their great captains of industry, to bring to pass the beneficent results so earnestly desired by all.

Political Significance of the Canal.—The primary object of an interoceanic waterway was the shortening of routes and the consequent betterment and extension of the carrying trade of the world. We must, therefore, regard it not as a private enterprise, but as a national and international highway, whose establishment must benefit all the nations using it. To the United States belongs the glory of achieving the great work. In considering the probable effects—political and economic—of the new thoroughfare, there is strong evidence that its greatest benefits will accrue to the nation which furnished the courage, genius, and wealth necessary to its construction. Other nations will gain much. The United States will see that this new highway is kept open to the world under terms which could not offend honorable business men in a private enterprise. The Canal runs through territory owned by the United States, but at a distance of nearly 2,000 miles from the chief ports and the commercial center of the home domain. Therefore the Federal Government, acting upon sound business principles, has taken steps which will enable it to make good its promise to safeguard the interests of the commercial world. It has fortified the approaches and line of the Canal in order that the Canal may be preserved from danger of attack and destruction. Any other course would be inimical, in the long run, to the interests of all nations. The political and strategical aspects of the Canal have been recognized from the beginning. The voyage of the Oregon, during the war with Spain in 1898, was an object lesson that brought home to the nation a realization of the weakness of our defenses in time of war. It undoubtedly crystallized the sentiment, which had been gathering for years, in favor of a canal to be built and operated by the United States. The Panama Canal doubles the power of our navy without increasing the number of our fighting ships; it strengthens the defenses of our long stretches of seacoast by making possible the rapid transfer of forces from one coast to the other; it means greater safety at smaller expenditure of time and money than would otherwise be possible. The tolls of the Canal may not be sufficient for many years to return interest upon the money investment which it represents; but the nation will have compensation for the outlay in the increased security of her domain and the great saving achieved in the movements of her warships.

Some of the Economic Results which are Anticipated.—In addition to the political and strategical benefits gained, the United States expects two great economic results to follow the completion of the Canal: the development of her territory and the extension of her commerce. The changes will come very gradually, but each year will mark an advance towards the attainment of those results. Our ambition is honorable, creditable alike to the United States and to those nations of Europe which are represented in our citizenship.

Settlement and Development of the National Domain.—European settlement along the coast of the New World met with no great natural barriers when the time came for a westward extension. Following the establishment of independence, a tide of immigration set in which gained in force as the years advanced. As the Republic extended her territory westward there were always hardy and venturesome people from the Eastern States ready to occupy the new lands opened by that extension. Thus the Middle West, the Mississippi Valley, and the Northwest were settled, and all prospered. The wealth of farm and forest, of mine and factory, was theirs. Then appeared the golden vision of the Far West, and the rush to California began. That was in the late 40's. A few years more and the settlement of the great plains region and the inter-mountain region was well under way. The history of it all is wonderful, entrancing. The United States, to-day, is great in territory, in population, and in wealth. What is still better, she has in reserve vast areas which are undeveloped, and room for a population many times greater than that of the present day.

Rapid and marvelous as has been the settlement of the Western States, the fact remains that the wealth of their resources has hardly been touched. It is, therefore, in the western third of her continental domain, that the United States is expected to show the earliest and greatest development as a result of the new facilities offered by the Panama Canal. In what way will this new waterway promote the development of the West? It will bring laborers to the fields and mines; it will bring nearer old markets and open new ones where an exchange of products for those of other lands may be profitably carried on. Some idea of the range of the coast products may be gained from the fact that Washington ranks as the fourth wheat-producing state in the Union, while Southern California is finding cotton a profitable crop. Timber, fruit, and

petroleum may be mentioned as the principal products of the group as a whole.

We may gain some conception of the extent of the unoccupied areas in this country by a comparison of the western states with some of the older and more densely populated eastern states. California, Oregon, and Washington have a combined area of 318,095 square miles and a total population (census of 1910) of only 4,192,304, or an average of only 14 people to the square mile. According to the same census, the density of population in New Jersey was 337 to the square mile and that of Rhode Island over 400. Given a density of population of only 300 to the square mile the three Pacific Coast States alone would hold a population of about 95,500,000, or more people than were found in the entire continental domain of the United States in 1910. A comparison with some of the densely peopled countries of Europe is even more impressive. Germany and Italy have a combined area of 319,440 square miles, and a density of population which equals about 310 to the square mile. With the same density of population as that of these two European countries, the Pacific Coast States, with a slightly smaller area, would show a total population of 98,609,450 as against the total of 99,026,400 which those two countries would contain.

To the east of the Pacific Coast States is a group of eight commonwealths known as the Mountain States. These, roughly speaking, cover the space between the Sierra Nevada and Cascade ranges and the Rocky Mountains, with their eastern and western slopes. The area of these eight states is 859,125 square miles, or more than two and one-half times that of the Pacific States. Each of these states has its own advantages. Montana has great mineral wealth and enormous water power. It is one of the best developed, best equipped, and most promising of the group. Wyoming has a plentiful supply of coal and great agricultural possibilities. Colorado is also splendidly endowed with mineral wealth, and possesses a climate renowned for its health-giving properties. Idaho and Utah have made astonishing growth and are rich in natural advantages. Farther south are Arizona and New Mexico, great in mineral and agricultural advantages. Nevada, although slow in growth, is steadily gaining and doubtless has much hidden mineral wealth.

Millions of acres of unappropriated and unoccupied lands are available for settlers in the Pacific Coast and Mountain States. Besides the government-owned lands, are others, now owned by railroad companies, land companies, irrigation companies, and other corporations which are ready to dispose of their holdings on terms that even a poor man can meet. There are, of course, considerable areas in the mountainous sections of all of these states, which will never be fit for occupation; but, after making wide allowance for the waste places, there will still be room in the productive areas, and for many generations to come, for the overflow from foreign countries and the natural increase of population.

After all, the places which we now designate as waste may prove a source of future wealth exceeding that promised by the fertile areas of the present. To realize that such an event is possible, it is but necessary to reflect that the attractions of mountain scenery are to-day the chief source of wealth to Switzerland, and, in a lesser degree, to other countries of Europe. Here are to be found mountains, plains, thermal springs, geysers, forests of giant trees, prehistoric remains, and natural features which will attract pleasure seekers and students through the coming ages.

The demand for manual labor of all kinds is very great in all parts of the United States and is especially pressing on the Pacific Coast. Emigration from Europe to this section has hitherto been held in check by the distance and expense of the journey. Those obstacles are now removed by the shortened all-water voyage, and the people of the West are scarcely more enthusiastic over the prospect of a growth in trade and in manufactures than they are over the possibility of having their necessities relieved by a new supply of white laborers from abroad who will be content with reasonable wages. The call for workers will be answered. Immigration agents have for some time been offering a continuous ocean passage from southern European ports to the Pacific Coast at extremely low rates. The slight excess in cost over that to Atlantic ports is more than offset by the superior attraction of the new country and the countless opportunities there offered. Immigration will stream out from the Pacific ports over the Coast States and to the Mountain States beyond, where await the home-seekers fertile soils, waterpowers now running to waste, virgin forests of valuable timber, and mines whose wealth is still untouched. With the laborers will go the men of capital who will find openings for investments of many kinds—works of irrigation, agriculture, stock-raising, fruit-growing, mining, lumbering, railroad building, and ship building. The great northwestern territory of Alaska, full of promise for the capitalist and the laborer, will share in the benefits of a shorter route to eastern markets and greater facilities for immigration.

Occupation of territory and development of resources in the United States have moved from East to West. The time is coming when a great wave of immigration and industrial growth will

View from Balboa

move from the Pacific Coast eastward, over the mountains to the plains beyond. As long ago as 1852 Mr. W. H. Seward prophesied that the time would come when Europe would sink into unimportance, and that the Pacific Ocean would become the chief area of events in the world's future. That prophesy has not yet been fulfilled; but its ultimate realization is certain. The West is the Land of Promise for generations to come.

The Panama Canal means other canals, which in coming years will occupy our engineers and give employment to thousands of laborers. They will open a vast net work of waterways over the land, linking the lakes and rivers of the interior. This will give to the inland sections of the country an enlarged commerce at lower rates, thus providing for a greater industrial growth than now seems possible. There are great opportunities for development along the Mississippi and its numerous tributaries.

The industries of the states bordering the Gulf of Mexico and the South Atlantic states will benefit greatly by the opening of new markets on the Pacific. Alabama coal will be extensively used by the coaling stations on the Isthmus. The iron industries of the Birmingham district will find new markets for their output in South American and Oriental countries. The same conditions will hold in regard to raw cotton, cotton textiles, and the products of the lumber and wood industries.

The northeastern section of the United States comprises the oldest states in point of settlement. Their natural resources have been known and utilized for many years. The areas which have not been occupied and developed are few in number and of small extent. Agriculture is still and will continue to be the chief occupation of the people, but this is also a region of great coal-mining and oil industries, and it leads all other sections of the Union in the variety and importance of its manufactures. It is the commercial center of the country. Its foreign and domestic trade exceeds that of all other sections combined. The ship-building plants of the New England and Middle Atlantic States are experiencing an activity such as they have never known before. The advantage, which the new short route to the Pacific gives to the manufacturing and commerical interests of these states, in competing for trade with Western Europe in the markets of South America and Oceania, can hardly be overestimated.

Effect of the Canal upon our Domestic Commerce.—There can be no doubt whatever of the effect which the Canal is to exert upon the domestic commerce of the country. It shortens by nearly 8,000 miles the water route between the ports of the Atlantic and Pacific coasts, and removes the necessity for a transshipment by rail across the isthmuses of Panama and Tehuantepec. The products of the Pacific and Atlantic states can henceforth be exchanged at such saving in time and transportation charges that the general cost of living in both sections must be affected in favor of the consumer.

Effect of the Canal upon our Foreign Commerce.—It is not strange that there should still be some doubt in the minds of Europeans as to the effects of the Panama Canal upon the foreign commerce of the United States. The Merchant Marine of this country has suffered in the past from legislative restrictions. These have so crippled its operations that the commercial nations of Europe have come to regard it as a negligible factor in the competition for international trade. The American government is removing those restrictions and a great change is anticipated.

Reference to the map will show how far-reaching will be the effects of the Canal upon the foreign commerce of the United States. Taking New York as a representative port on the Atlantic seaboard, the Pacific regions (over and above those of the two Americas) which will be brought nearer by the Canal may be demonstrated as follows:—If a line be drawn from Hong-Kong through British North Borneo, and on through Western Australia to Cape Leeuwin, the southwestern extremity of the island continent, it will mark the western limit of the area affected. It will be found that the whole of Japan, the majority of the ports of China, the Philippine Islands, all ofAustralia, except the western coast regions, New Zealand, and most of the islands of Oceania are included. Broadly speaking, this means that China will be about equi-distant by sea from both New York and London, while the important ports of southeastern Australia, the ports of New Zealand, and those of Japan, will be nearer to New York via Panama than to London by any route, by distances of from 1000 to 3700 miles. It is obvious that the southeastern and Gulf ports of the country are even more advantageously placed for making use of the Canal than is New York. We have before noted the probable effects which the opening of what to them is a new gateway to the East will have upon our Pacific ports. From San Francisco all the ports of Europe and the whole of the African coast, with the exception of a strip on the Indian Ocean extending from the Strait of Bab-el-Mandeb to Delagoa Bay, will become more accessible.

Our Trade with the Countries of Latin-America.—Great reductions have been made in the steaming distances between the ports of our Atlantic seaboard and those of Latin-America bordering on the Pacific; the same is true of our

Pacific seaboard in its relation to the ports of the West Indies and of the countries of Latin-America bordering on the Caribbean Sea and the Atlantic Ocean. The Pacific countries of Latin-America have a seacoast of more than 8,000 miles and occupy an area of about 2,500,000 square miles. They have a population estimated at 37,000,000. Those countries are bound to grow in wealth and population. Their foreign trade more than doubled in the fifteen years previous to the completion of the Canal, reaching a total of approximately $800,000,000. In this trade the United States had a share of but 37 per cent. By far the greater part has gone to Great Britain and Germany. Those countries will now feel the keen competition of the United States. Mr. John Barrett of the Pan-American Union, who is well fitted to judge of the effects of the Canal, prophesies an immense increase in the total trade of those countries and a more than corresponding increase in the share which will fall to the United States. In his book on the Panama Canal he says: "The opening of the Panama Canal will mean that the Pacific Coast of Latin America will want in increasing quantities our iron and steel manufactures; our steam and electric railway materials; our structural iron and steel; our sewing machines, typewriters, and cash registers; our cotton cloth; our wood and lumber; our flour, butter, cheese, and lard; our agricultural implements; boots and shoes; jewelry; furniture and hardware; drugs and medicines; automobiles; coal; illuminating and crude oils; news print paper; binder twine; clothing; books and maps; and numerous other articles demanded by a developing country and population." The ships which bear our products to the south will bring back for our use sugar, coffee, rubber, bananas, cocoanuts, nitrates, hides and skins, chinchilla, henequen, sisal, wool, ivory-nuts, tin, copper, quinine, tobacco leaf, and beef.

The development and new life that will come to the West Indies, and to the Latin-American countries bordering on the Gulf of Mexico and the Caribbean Sea, as a result of the new thoroughfare, will bring an increase of trade to both the Pacific and Atlantic ports of the United States. The West Indies are now situated on one of the great highways of the world's trade and those islands will grow both in commercial and strategical importance. Their improved situation is bound to attract both population and capital.

Our Commerce with the Far East.—The United States already enjoys a large and growing commerce with the Far East, whose awakening assumes a new and added interest when considered in connection with the completion of the Panama Canal. China has enormous deposits of coal and iron. The time is coming when she will not lag behind Japan which has become one of the trading nations of the world. The products of the iron mines of China, developed by cheap labor, have entered our markets and they will continue to come in ever increasing volume. Chinese labor is stated to be within ten per cent. of an equality with the best white labor, and its cost is much cheaper. With settled political conditions the Chinese will undoubtedly develop manufactures and the time may come when not only Chinese pig-iron, but Chinese structural steel will invade American markets. This will be beneficial if the Chinese products are brought in American vessels and not in those of Japan.

An Era of American Ship-building.—American coastwise shipping is already a vast fleet, greater in tonnage and efficiency than ever before. The era of American ship-building has but just begun. American preparation for extensive use of the Panama Canal is ambitious and far reaching. American ship-builders were not idle while the men on the Isthmus were digging the big ditch; they were busy in the construction of ocean-going vessels to be employed upon the isthmian route. The growth of both our domestic and our foreign commerce is as sure as the existence of the Canal itself.

Effects of the Panama Canal upon other Countries.—Much of that which has been said as to the benefits which will come as a result of the shortened water route between the Atlantic and Pacific seaboards of the United States applies also to Canada. Vancouver of all the ports in the British Empire is the one most likely to be favorably affected by the completion of the Panama Canal. That this is realized is shown by the preparations there being made for increased traffic. Farther north is the fine deep-water harbor of Prince Rupert, the terminus of the Grand Trunk Pacific Company's new transcontinental line, which will become of great importance in the near future. Victoria, on Vancouver Island, and New Westminster on the mainland are fully awake to the potentialities of the change in transport conditions.

The province of British Columbia, of which these ports are the outlets, is one of great and varied resources, which up to the present time have been but slightly developed, although a growing commercial intercourse has been established with China, Japan, Australia, and New Zealand. The water route from Liverpool to Vancouver is shortened 5,921 miles by the Canal. For a vessel steaming 300 knots per day this means a saving of twenty days on each voyage.

The Panama Canal route offers a new outlet for the grain exports of the Canadian Northwest, which, hitherto, have been mainly carried

by rail to eastern seaports. An element in favor of the Canal route is the ice-free condition of the harbor at Vancouver throughout the year, while the ports of the St. Lawrence, though in a much lower latitude, are closed to commerce for several months in the year.

The Canal will be a boon to the countries of Western Europe, whose products destined for the Pacific States and the Canadian Northwest will no longer bear the burden of a long rail haul from Atlantic ports, but will be distributed by railroads from the Pacific ports.

The significance of the new waterway as affecting European interests in their trade with the countries of Latin-America which border the Pacific may have been exaggerated. There is a point far to the south on the Chilean coast, which is equidistant by the Panama route and that by the Straits of Majellan. To reach ports at no great distance from this line of demarcation, the saving in time and expense would be so small as to fail to justify the use of the Canal, with its attendant tolls. From Valparaiso northwards there is a steady gain in favor of the Canal route. Thus for a vessel steaming 300 knots per day there will be a saving in time, which increases from about seven days at Valparaiso to twenty days at Acapulco, Mexico. Mileage run is an important factor, but the gain which will be made in distance will to some extent be offset by the tolls, and by the keener competition to which European manufacturers and ship owners will now be subjected.

Excluding the countries of the two Americas which have Pacific seaboards, there is no region of commercial importance brought nearer to the trading nations of Western Europe by the Panama Canal, with the exception of New Zealand (to which the distance is shortened by only 900 miles), the Hawaiian and Fijiian islands, and the scattered archipelagoes of Polynesia and Micronesia. Hawaiian trade is almost wholly in the hands of the United States and is likely to remain so. In New Zealand, in Australasia, in China and Japan, the traders of Europe have now to meet the competition of those of the United States.

It is possible that the Panama Canal may become an alternative route from Europe to the Far East, even where the distance is greater than by the Suez route. This will be the case if the trade to be gained from the ports of the West Indies, and from the ports of call on the Pacific seaboard of the Americas, will make the longer voyage profitable. Another element in favor of the new route is that it is available for larger vessels, for whereas the maximum draught at present allowed through the Suez Canal is only 28 feet, the Panama Canal has a minimum depth of over 41 feet.

XI. THE PANAMA RAILROAD

The new or relocated line of the Panama railroad is 47.11 miles long, or 739 feet longer than the old line. From Colon to Mindi, 4.17 miles, and from Corozal to Panama, 2.83 miles, the old line is used, but the remaining 40 miles is new road. From Mindi to Gatun, the railroad runs, in general, parallel to the Canal, and ascends from a few feet above tidewater elevation to 95 feet above. At Gatun, the road leaves the vicinity of the Canal and turns east along Gatun Ridge to a point about 4½ miles from the center line of the Canal, where it turns southward again and crosses the low Gatun Valley to Monte Lirio, from which point it skirts the east shore of Gatun Lake to the beginning of the Culebra Cut at Bas Obispo. In the Gatun Valley section there are several immense embankments necessary to place the line above the lake level. Likewise, near the north end of Culebra Cut, where the line was located as so to furnish waste dumps for spoil from the Canal, there are several very heavy embankments. Originally it was intended to carry the railroad through Culebra Cut on a 40-foot berm along the east side, 10 feet above the water level, but the numerous slides made this plan impracticable and a line was constructed, on a high level around the Cut, known locally as the Gold Hill Line. Leaving the berm of the Canal at Bas Obispo, the Gold Hill Line cuts through a ridge of solid rock, and gradually works into the foothills, reaching a distance from the center line of the Canal of two miles opposite Culebra; thence it runs down the Pedro Miguel Valley to Paraiso, where it is only 800 feet from the center line of the Canal. From the south end of Culebra Cut at Paraiso, the railroad runs practically parallel with the Canal to Panama. Where the railroad crosses the Gatun River, near Monte Lirio, a steel girder bridge has been erected, the center span of which is in the form of a lift, to permit access to the upper arm of Gatun Lake. The Chagres River at Gamboa is crossed on a steel-girder bridge, one-quarter mile long, with one 200-foot through truss channel span. Numerous other rivers and small streams are crossed on reinforced concrete culverts. Near Miraflores, a tunnel 736 feet long has been built through a hill.

TABLE A.—Number of days saved, for vessels of different speeds, by the Panama Canal route between the Atlantic-Gulf ports of the United States and Pacific ports, American and foreign.

To—	From— New York, for vessels of—					Charleston, for vessels of—					Port Tampa, for vessels of—					New Orleans, for vessels of—					Galveston, for vessels of—				
	9 knots.	10 knots.	12 knots.	14 knots.	16 knots.	9 knots.	10 knots.	12 knots.	14 knots.	16 knots.	9 knots.	10 knots.	12 knots.	14 knots.	16 knots.	9 knots.	10 knots.	12 knots.	14 knots.	16 knots.	9 knots.	10 knots.	12 knots.	14 knots.	16 knots.
Sitka	35.9	32.3	26.8	22.9	20.0	37.6	33.8	28.1	24.0	20.9	40.0	35.9	29.8	25.5	22.2	40.5	36.4	30.2	25.9	22.6	40.8	36.7	30.5	26.1	22.7
Port Townsend	35.9	32.3	26.8	22.9	20.0	37.6	33.8	28.1	24.0	20.9	40.0	35.9	29.8	25.5	22.2	40.5	36.4	30.2	25.9	22.6	40.8	36.7	30.5	26.1	22.7
Portland, Oregon	35.9	32.3	22.8	22.9	20.0	37.6	33.8	28.1	24.0	20.9	40.0	35.9	29.8	25.5	22.2	40.5	36.4	30.2	25.9	22.6	40.8	36.7	30.5	26.1	22.7
San Francisco	35.9	32.3	26.8	22.9	20.0	37.6	33.8	28.1	24.0	20.9	40.0	35.9	29.8	25.5	22.2	40.5	36.4	30.2	25.9	22.6	40.8	36.7	30.5	26.1	22.7
San Diego	36.0	32.3	26.8	22.9	20.0	37.6	33.8	28.1	24.0	20.9	40.0	35.9	29.9	25.5	22.3	40.6	36.4	30.3	25.9	22.6	40.9	36.8	30.5	26.1	22.8
Acapulco	36.9	33.2	27.5	23.5	20.5	38.5	34.6	28.8	24.6	21.5	40.9	36.8	30.5	26.1	22.8	41.5	37.3	31.0	26.5	23.1	41.8	37.6	31.2	26.7	23.3
San Jose de Guatemala	38.0	34.2	28.4	24.3	21.2	40.2	35.7	29.7	25.4	22.1	42.1	37.9	31.5	26.9	23.5	42.6	38.4	31.9	27.3	23.8	43.0	38.7	32.1	27.5	24.0
Honolulu	30.1	27.0	22.4	19.1	16.7	31.7	28.5	23.7	20.2	17.7	34.1	30.7	25.5	21.8	19.0	34.7	31.2	25.9	22.1	19.3	35.0	31.5	26.2	22.4	19.5
Guayaquil	33.7	30.3	25.2	21.5	18.7	35.4	31.8	26.5	22.6	19.7	37.8	34.0	28.3	24.1	21.1	38.4	34.5	28.7	24.5	21.4	38.7	34.8	28.9	24.7	21.6
Callao	28.4	25.5	21.2	18.1	15.7	30.1	27.0	22.4	19.2	16.7	32.5	29.2	24.2	20.7	18.1	33.0	29.7	24.7	21.1	18.4	33.4	30.0	24.9	21.3	18.5
Iquique	23.3	20.9	17.3	14.8	12.9	25.0	22.4	18.6	15.8	13.8	27.3	24.5	20.4	17.4	15.2	27.9	25.0	20.8	17.7	15.4	28.3	25.3	21.0	17.9	15.6
Valparaiso	16.8	15.1	12.5	10.6	9.2	18.5	16.6	13.7	11.7	10.2	20.9	18.7	15.5	13.2	11.5	21.4	19.2	16.0	13.6	11.8	21.8	19.5	16.2	13.8	12.0
Coronel	14.7	13.2	10.9	9.3	8.1	16.4	14.7	12.2	10.4	9.0	18.8	16.9	14.0	11.9	10.4	19.4	17.4	14.4	12.3	10.7	20.5	17.7	14.6	12.5	10.9
Yokohama	16.9	15.2	12.6	10.7	9.3	20.7	18.5	15.4	13.1	11.4	25.3	22.8	18.9	16.1	14.0	25.9	23.3	19.3	16.5	14.4	26.2	23.6	19.5	16.7	14.5
Shanghai	8.1	7.3	6.0	5.1	4.4	11.9	10.7	8.8	7.5	6.5	16.6	14.8	12.3	10.4	9.1	17.1	15.4	12.7	10.8	9.4	17.4	15.7	13.0	11.1	9.6
Hongkong	....	....	....	....	....	3.1	2.8	2.2	1.9	1.5	7.8	7.0	5.7	4.8	4.2	8.4	7.5	6.2	5.2	4.5	8.7	7.8	6.4	5.4	4.7
Manila	....	....	....	....	....	3.4	3.0	2.4	2.0	1.7	8.1	7.2	5.9	5.0	4.3	8.6	7.7	6.4	5.4	4.7	9.0	8.0	6.6	5.6	4.8
Adelaide	7.5	6.7	5.6	4.6	4.0	10.4	9.3	7.7	6.5	5.6	14.0	12.5	10.4	8.8	7.7	14.6	13.1	10.8	9.2	8.0	14.9	13.3	11.0	9.4	8.1
Melbourne	12.3	11.0	9.1	7.7	6.7	15.1	13.5	11.2	9.5	8.3	18.7	16.8	14.0	11.9	10.3	19.3	17.3	14.3	12.2	10.7	19.6	17.6	14.6	12.4	10.8
Sydney	17.7	15.8	13.1	11.2	9.7	20.5	18.4	15.3	13.0	11.3	24.1	21.7	18.0	15.3	13.4	24.6	22.2	18.4	15.7	13.7	25.0	22.4	18.6	15.9	13.8
Wellington	11.0	9.9	8.1	6.9	6.0	12.7	11.4	9.4	8.0	6.9	15.1	13.5	11.2	9.5	8.3	15.6	14.0	11.6	9.9	8.6	15.9	14.3	11.8	10.5	8.7

TABLE B.—Number of days saved, for vessels of different speeds, by the Panama Canal route between European ports and ports of Pacific America and of New Zealand.

To—	From—																From—									
	Liverpool, for vessels of—					Hamburg, for vessels of—				Antwerp, for vessels of—						Bordeaux, for vessels of—					Gibraltar, for vessels of—				
	9 knots.	10 knots.	12 knots.	14 knots.	16 knots.	9 knots.	10 knots.	12 knots.	14 knots.	16 knots.	9 knots.	10 knots.	12 knots.	14 knots.	16 knots.	9 knots.	10 knots.	12 knots.	14 knots.	16 knots.	9 knots.	10 knots.	12 knots.	14 knots.	16 knots.
Sitka	25.7	23.1	19.1	16.3	14.2	25.1	22.5	18.7	15.9	13.9	25.1	22.5	18.7	15.9	13.9	24.4	21.9	18.1	15.5	13.5	22.4	20.1	16.7	14.2	12.3
Port Townsend	25.7	23.1	19.1	16.3	14.2	25.1	22.5	18.7	15.9	13.9	25.1	22.5	18.7	15.9	13.9	24.4	21.9	18.1	15.5	13.5	22.4	20.1	16.7	14.2	12.3
Portland, Oregon	25.7	23.1	19.1	16.3	14.2	25.1	22.5	18.7	15.9	13.9	25.1	22.5	18.7	15.9	13.9	24.4	21.9	18.1	15.5	13.5	22.4	20.1	16.7	14.2	12.3
San Francisco	25.7	23.1	19.1	16.3	14.2	25.1	22.5	18.7	15.9	13.9	25.1	22.5	18.7	15.9	13.9	24.4	21.9	18.1	15.5	13.5	22.4	20.1	16.7	14.2	12.3
San Diego	25.7	23.1	19.2	16.4	14.3	25.1	22.5	18.7	15.9	13.9	25.1	22.5	18.7	15.9	13.9	24.5	21.9	18.2	15.5	13.5	22.4	20.1	16.7	14.2	12.4
Acapulco	26.7	23.9	19.9	17.0	14.8	26.0	23.4	19.4	16.6	14.4	26.0	23.4	19.4	16.6	14.4	25.3	22.8	18.9	16.1	14.1	23.4	21.0	17.4	14.8	12.9
San Jose de Guatemala	27.8	25.0	20.8	17.7	15.4	27.2	24.4	20.3	17.3	15.1	27.2	24.4	20.3	17.3	15.1	26.5	23.8	19.8	16.8	14.7	24.5	22.0	18.3	15.6	13.6
Honolulu	19.8	17.8	14.8	12.6	10.9	19.2	17.2	14.3	12.2	10.6	19.2	17.2	14.3	12.2	10.6	18.5	16.6	13.7	11.7	10.2	16.5	14.8	12.3	10.4	9.1
Guayaquil	23.5	21.1	17.5	14.9	13.0	22.9	20.6	17.1	14.6	12.7	22.9	20.6	17.1	14.6	12.7	22.2	19.9	16.5	14.1	12.2	20.2	18.2	15.0	12.8	11.1
Callao	18.2	16.3	13.5	11.5	10.0	17.6	15.8	13.1	11.5	9.7	17.6	15.8	13.1	11.5	9.7	16.8	15.1	12.5	10.6	9.2	14.9	13.3	11.0	9.4	8.1
Iquique	13.1	11.7	9.7	8.2	7.1	12.4	11.1	9.2	7.8	6.8	12.4	11.1	9.2	7.8	6.8	11.7	10.5	8.7	7.3	6.3	9.7	8.7	7.2	6.1	5.2
Valparaiso	6.6	5.9	4.8	4.1	3.5	6.0	5.3	4.3	3.5	3.1	6.0	5.3	4.3	3.5	3.1	5.3	4.7	3.8	3.2	2.7	3.3	2.9	2.3	1.9	1.6
Coronel	4.5	4.0	3.3	2.7	2.3	3.9	3.4	2.8	2.3	1.9	3.9	3.4	2.8	2.3	1.9	3.1	2.8	2.2	1.8	1.5	1.2	1.0	0.8	0.6	0.5
Wellington	6.7	6.0	4.9	4.2	3.5	6.0	5.3	4.4	3.7	3.2	6.0	5.3	4.4	3.7	3.2	5.3	4.7	3.8	3.2	2.7	1.7	1.5	1.2	0.6	0.5

Opion